S. HRG. 101-658

DEPARTMENT OF ENERGY'S NUCLEAR FACILITIES

HEARING

BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

FIRST SESSION

ON

S. 972

TO TRANSFER TO THE SECRETARY OF HEALTH AND HUMAN SERVICES THE AUTHORITY OF THE SECRETARY OF ENERGY TO CONDUCT EPIDEMIOLOGICAL STUDIES OF THE EFFECTS OF RADIATION, AND FOR OTHER PURPOSES

S. 1304

TO ENHANCE NUCLEAR SAFETY AT DEPARTMENT OF ENERGY NUCLEAR FACILITIES, TO MODIFY CERTAIN FUNCTIONS OF THE DEFENSE NUCLEAR FACILITIES SAFETY BOARD, TO APPLY THE PROVISIONS OF OSHA TO CERTAIN DEPARTMENT OF ENERGY NUCLEAR FACILITIES, TO CLARIFY THE JURISDICTION AND POWERS OF GOVERNMENT AGENCIES DEALING WITH NUCLEAR WASTES, TO ENSURE INDEPENDENT RESEARCH ON THE EFFECTS OF RADIATION ON HUMAN BEINGS, TO ENCOURAGE A PROCESS OF ENVIRONMENTAL COMPLIANCE AND CLEANUP AT THESE FACILITIES, TO PROTECT COMMUNITIES THAT CONTAIN THESE FACILITIES, AND FOR OTHER PURPOSES

S. 1802

TO ENHANCE NUCLEAR SAFETY AT DEPARTMENT OF ENERGY NUCLEAR FACILITIES, TO APPLY THE PROVISIONS OF THE OCCUPATIONAL, HEALTH, AND SAFETY ACT TO CERTAIN DEPARTMENT OF ENERGY NUCLEAR FACILITIES, TO ENCOURAGE INDEPENDENT RESEARCH ON THE EFFECTS OF RADIATION ON HUMAN BEINGS, TO ESTABLISH A COMPREHENSIVE PROGRAM WITHIN THE DEPARTMENT OF ENERGY OF RESEARCH, DEVELOPMENT, AND DEMONSTRATION OF METHODS FOR WASTE CLEANUP AND REMEDIATION, TO ESTABLISH A PROCESS FOR ENSURING CLEANUP OF DEPARTMENT OF ENERGY NUCLEAR FACILITIES, AND FOR OTHER PURPOSES

OCTOBER 5, 31, AND NOVEMBER 13, 1989

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DEPARTMENT OF ENERGY'S NUCLEAR FACILITIES

THURSDAY, OCTOBER 5, 1989

U.S. Senate,
Committee on Energy and Natural Resources,
Washington, DC.

The committee met, pursuant to notice, at 9:17 a.m., in room SD-366, Dirksen Senate Office Building, Hon. Wendell H. Ford, presiding.

OPENING STATEMENT OF HON. WENDELL H. FORD, U.S. SENATOR FROM KENTUCKY

Senator Ford. Good morning, ladies and gentlemen. Senator Johnston will be a few minutes late this morning, so he gave me the opportunity to open the hearing.

Today we are holding full committee hearings on the Department of Energy's nuclear facilities and on two bills before the committee that relate to these facilities. These bills are S. 974 by Senator Wirth and S. 1304 by Senator Glenn.

This hearing will also provide an opportunity for the Secretary of Energy, Admiral Watkins, to bring us up to date on the progress he has made in addressing the problems at these facilities. We would like the Secretary's candid opinion about the two pieces of legislation before this committee.

Senator Wirth's bill addresses the question of who should be in charge of research on whether radiation is causing cancer among DOE workers. This is an important issue, and we would benefit from the Secretary's views.

Senator Glenn's bill addresses a number of issues including, among others, the scope of the Defense Nuclear Safety Board just created last year; whether to give the Occupational Health and Safety Administration authority over DOE facilities; agreements for compliance with environmental laws at DOE facilities; the regulation of mixed toxic and radioactive waste produced from these facilities; and the same radiation research issue that Senator Wirth's bill addresses.

We are very interested in the Secretary's views on all of these issues, and if this is the authority the Secretary needs to do his job, we should provide it. We should not be getting in his way. If there are problems to be solved, we should set up a process to solve them. Let others argue over who is to blame. The important thing is to get on with the solutions.

With that in mind, I am very pleased to welcome to the hearing this morning the distinguished Senator from Ohio, Senator Glenn.

John, you may proceed, and we look forward to your statement.

[The prepared statements of Senators Johnston, Ford, and McClure, and the texts of S. 972 and S. 1304 follow:]

STATEMENT OF SENATOR J. BENNETT JOHNSTON

HEARING ON DOE NUCLEAR FACILITIES

October 5, 1989

THE SUBJECT OF OUR HEARINGS THIS MORNING IS THE STATUS OF DEPARTMENT OF ENERGY NUCLEAR WEAPONS COMPLEX. SECRETARY OF ENERGY JAMES D. WATKINS WILL BE OUR PRINCIPAL WITNESS. THIS WILL BE AN OPPORTUNITY FOR HIM TO PUT IN THE RECORD A COMPREHENSIVE STATEMENT ON WHAT HAS BEEN ACCOMPLISHED SO FAR, AND, MORE IMPORTANTLY, WHAT REMAINS TO BE DONE.

TODAY IS HIS CHANCE TO COMMENT ON THE ADDITIONAL AUTHORITY HE NEEDS, IF ANY, AND ON ANY ADDITIONAL CONGRESSIONAL DIRECTION HE WOULD LIKE TO RECEIVE. IT IS ALSO THE TIME FOR HIM TO COMMENT ON THE PROPOSED HELP HE WOULD RECEIVE UNDER TWO BILLS BEFORE THE COMMITTEE:

FIRST, SENATOR GLENN'S BILL, S.1304, WHICH WOULD MAKE SEVERAL SIGNIFICANT CHANGES IN THE WAY THE DEPARTMENT OPERATES, INCLUDING SUBJECTING DOE TO REGULATION BY OSHA AND EPA AND REQUIRING DOE TO ENTER INTO COMPLIANCE AGREEMENTS WITH STATE GOVERNMENTS; AND

SECOND, SENATOR WIRTH'S BILL, S.972, WHICH WOULD TRANSFER TO THE DEPARTMENT OF HEALTH AND HUMAN SERVICES DOE'S PROGRAMS OF EPIDEMIOLOGICAL RESEARCH.

I HAVE A NUMBER OF QUESTIONS TO ASK MYSELF. I AM PARTICULARLY INTERESTED IN THE SITUATION THAT HAS ARISEN AT ROCKY FLATS. IT APPEARS

THAT THE DEPARTMENT'S CONTRACT FOR OPERATING THAT FACILITY REQUIRED ACTIONS OF DOE AND CONTRACTOR EMPLOYEES THAT WOULD HAVE PLACED THE CONTRACTOR AND THOSE EMPLOYEES IN DANGER OF PROSECUTION BY EPA, THE JUSTICE DEPARTMENT, THE STATE OF COLORADO OR ALL THREE. IF SO, THIS IS AN UNTENABLE SITUATION, AND WE SHOULD BE LOOKING FOR A BETTER WAY TO RESOLVE IT THAN CANCELLING THE CONTRACT.

THE FACT IS THAT THESE FACILITIES MUST OPERATE. THEIR FUNCTION, NATIONAL DEFENSE, IS NOT A DISCRETIONARY FUNCTION OF GOVERNMENT. WE MUST FIND A WAY TO OPERATE THESE FACILITIES WITHOUT ENTANGLING THE FEDERAL GOVERNMENT AND ITS CONTRACTORS IN A WEB OF SELF-GENERATED RESTRICTIONS AND OBSTACLES.

WE ALL KNOW THAT DOE'S NUCLEAR FACILITIES WERE DESIGNED AND OPERATED INITIALLY IN A VERY DIFFERENT POLITICAL ENVIRONMENT AND WITH VERY DIFFERENT EXPECTATIONS THAN WE HAVE TODAY. THESE FACILITIES MUST NOW COMPLY WITH REGULATIONS THAT WERE NEVER DREAMED APPLICABLE EVEN A FEW YEARS AGO. INCIDENTS OF NONCOMPLIANCE SHOULD NOT SURPRISE US AT ALL. WE SHOULD BE SURPRISED IF THERE ARE NO PROBLEMS IN MEETING THESE REGULATIONS.

PLACING THE BLAME FOR NONCOMPLIANCE IS NOT THE IMPORTANT THING. THE IMPORTANT THING IS TO DEVISE A PROCESS THAT LEADS TO COMPLIANCE. WE NEED A PROCESS THAT ENCOURAGES DISCLOSURE OF THE PROBLEMS AND WHICH BRINGS THE BEST TECHNOLOGY TO BEAR IN SOLVING THEM. WE NEED A CLEAR CHAIN OF RESPONSIBILITY FOR THE SOLUTIONS, AND WE NEED VIGOROUS OVERSIGHT OF THOSE RESPONSIBLE.

SENATOR GLENN AND SENATOR ADAMS WILL BE OUR FIRST WITNESSES THIS MORNING.

STATEMENT OF SENATOR WENDELL H. FORD

HEARING ON DOE NUCLEAR FACILITIES

October 5, 1989

SENATOR JOHNSTON WILL BE A FEW MINUTES LATE THIS MORNING, SO I WILL OPEN THE HEARING.

TODAY WE ARE HOLDING FULL COMMITTEE HEARINGS ON THE DEPARTMENT OF ENERGY'S NUCLEAR FACILITIES AND ON TWO BILLS BEFORE THE COMMITTEE THAT RELATE TO THESE FACILITIES. THESE BILLS ARE S.972, BY SENATOR WIRTH, AND S.1304, BY SENATOR GLENN. THIS HEARING WILL ALSO PROVIDE AN OPPORTUNITY FOR THE SECRETARY OF ENERGY, ADMIRAL WATKINS, TO BRING US UP TO DATE ON THE PROGRESS HE HAS MADE IN ADDRESSING THE PROBLEMS AT THESE FACILITIES.

WE WOULD LIKE THE SECRETARY'S CANDID OPINION ABOUT THE TWO PIECES OF LEGISLATION BEFORE THE COMMITTEE.

SENATOR WIRTH'S BILL ADDRESSES THE QUESTION OF WHO SHOULD BE IN CHARGE OF RESEARCH ON WHETHER RADIATION IS CAUSING CANCER AMONG DOE WORKERS. THIS IS AN IMPORTANT ISSUE, AND WE WOULD BENEFIT FROM THE SECRETARY'S VIEWS.

SENATOR GLENN'S BILL ADDRESSES A NUMBER OF ISSUES, INCLUDING, AMONG OTHERS:

-- THE SCOPE OF THE DEFENSE NUCLEAR SAFETY BOARD JUST CREATED LAST YEAR;

-- WHETHER TO GIVE THE OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION AUTHORITY OVER DOE FACILITIES;

-- AGREEMENTS FOR COMPLIANCE WITH ENVIRONMENTAL LAWS AT DOE FACILITIES;

-- THE REGULATION OF MIXED TOXIC AND RADIOACTIVE WASTES PRODUCED FROM THESE FACILITIES; AND

-- THE SAME RADIATION RESEARCH ISSUE THAT SEN. WIRTH'S BILL ADDRESSES.

WE ARE VERY INTERESTED IN THE SECRETARY'S VIEWS ON ALL THESE ISSUES.

IF THERE IS AUTHORITY THAT THE SECRETARY NEEDS TO DO HIS JOB, WE SHOULD PROVIDE IT. WE SHOULD NOT BE GETTING IN HIS WAY.

IF THERE ARE PROBLEMS TO BE SOLVED, WE SHOULD SET UP A PROCESS TO SOLVE THEM. LET OTHERS ARGUE OVER WHO TO BLAME. THE IMPORTANT THING IS TO GET ON WITH THE SOLUTIONS.

OPENING STATEMENT
SENATOR JAMES A. McCLURE
COMMITTEE ON ENERGY AND NATURAL RESOURCES
OCTOBER 5, 1989

DOE NUCLEAR FACILITIES MANAGEMENT

Good morning. This hearing is to receive testimony from Secretary Watkins on efforts by his Department to improve the operations and management of its nuclear facilities. The credible, safe and environmentally sound operation of these facilities is crucial to their acceptance by the American people.

As the United States enters the 21st Century, we are confronted with one of the most challenging problems in our history. Because of safety concerns at the Savannah River production complex, for the first time since the beginning of the nuclear age, the United States government has had to suspend tritium production. This is clearly unacceptable.

The American people have a right to expect that the United States government, as the leader of the Free World, will not only maintain our nuclear deterrent but will also adequately protect the health and safety of the American people. Unfortunately, this has not always been the case. Consequently, at some of the Department's nuclear facilities, we find that we must now deal with the unacceptable legacy of past mismanagement practices -- practices that should not have been allowed to occur.

For over 40 years, the Department of Energy and its predecessor, the Atomic Energy Commission, have operated an extensive complex of civilian and nuclear weapons facilities. Now we find that many of these facilities are plagued with environmental, health and safety problems that should not have been allowed to occur; they should have been dealt with as they arose.

As a consequence, we find ourselves faced with a situation that has been characterized as the equivalent of a balloon mortgage payment. When we initially built the defense production complex, and for many years of it operation, this nation collectively deferred or ignored its responsibility to fully deal with the related issues of health, safety, and waste management.

And now that bill has come due, Admiral Watkins and we in the Congress must formulate a responsible plan to clean up our past mistakes. There is enough failure to exercise our responsibility and blame to go around for why this was allowed to occur; all of us -- DOE and its predecessor agencies, administrations of both parties, and we in the Congress -- did not sufficiently exercise our oversight responsibilities or provide adequate funding. But simply pointing fingers doesn't deal with this problem: the bottom line is that the Federal government has an obligation -- indeed, it has a responsibility -- to correct these problems and modernize our defense production complex. The Federal government must now absorb the full costs of past nuclear deterrence policies over a short period of time Just as we cannot abdicate our position with respect to global defense, we also cannot neglect the health and safety of the very citizens that our defense strategy is designed to protect.

From this perspective, I fully support efforts by the Secretary to change the Department's philosophy governing the operation of the defense production complex to place long overdue emphasis on environmental, safety and health concerns. I further support his efforts to realign the Department's management functions based on the principles of --

-- first, competent DOE and contractor management that is prepared to provide the necessary leadership to foster a "safety culture" that has been sorely lacking at many Departmental facilities; and

-- second, line management that is wholly accountable for safety and attainment of the highest standards of operational excellence.

But it would be a mistake to assume that changes in structure are enough. I would suggest that the structure has always been there. The problem is that the structure placed too much emphasis on procedure, and not enough emphasis on substance. Because the structure itself provided a decision as to its output, facilities managers often avoided dealing personally with the substance of the decisions. In other words, accountability was transferred from the facility manager to the process itself, relieving the facility manager of his management responsibilities.

Many of today's environmental and safety problems are past problems which were both literally and figuratively buried under a philosophy of "out-of-sight, out-of-mind". Such practices were just as unacceptable then as they are today.

Changes in structure alone will not solve this problem, because the problem resides as much in the behavior of people as in the management structure. The prevailing mindset, best characterized as a "production culture", still pervades many of DOE's defense production facilities. The problem is how to change this mindset.

What has been missing is headquarter's oversight and DOE field office accountability as well as accountability by each facility's contractor-managers. What is needed is a contract management structure, starting in the DOE field offices, that establishes credible and effective control over the environmental, safety and health aspects of all the DOE nuclear facilities.

We are all familiar with reports in the media and from various "watch-dog" agencies about the problems at certain DOE weapons facilities, such as West Valley, the Feed Materials Production Center, the Savannah River production reactors, and Rocky Flats. But little is heard about other DOE nuclear facilities, such as the Pantex or Pinellas plants, or the Los Alamos, Sandia or Livemore laboratories. The obvious question is, is this because all is well or because no one knows?

Each of DOE's nuclear facilities has a different environmental, health and safety record. Some of the facilities would appear to have a better record than others, while some are in need of major improvement. In my questions, I intend to pursue whether there has been a unilateral disregard for safety and environmental matters, or are there DOE facilities that can be pointed to–as exceptions to a blanket charge of irresponsibility? In my opinion there has not been a unilateral disregard for safety and environmental matters; there are exceptions to the so called "production culture".

A critical question is: what has produced the differences that we observe today in the various environmental, health and safety records? If I am not mistaken, all of these facilities operated under essentially the same contractual arrangements. What produced the difference?

Equally important, among the various DOE nuclear facilities there is a wealth of environmental, safety and health expertise and experience that can be marshalled to deal with the issues before us today. Another critical question is: how can we transfer the expertise that exists at those DOE facilities with the best records to those that have the greatest problems? For example, there is extensive expertise and experience at the INEL (the Idaho National Engineering Laboratory) among the DOE and contractor personnel that is nationally recognized. This expertise is now being relied on at Savannah River. Other DOE facilities have similar expertise and experience on both how things should and shouldn't be done. A mechanism must be established to make this expertise available to those DOE facilities faced with environmental, health and safety problems.

But more importantly, the critical and fundamental issue to this discussion is what are the respective responsibilities of the DOE program and contract personnel and the DOE's contractor managers to assure that DOE's nuclear facilities live up to the same environmental, health and safety laws as the rest of our society. Their failure to do so undermines the very integrity of our national environmental, health and safety laws.

Historically, such nuclear weapons facilities have not been subject to State environmental regulation; nevertheless, the Federal government has an obligation to construct and operate such facilities consistent with today's national environmental policies and practices.

In recent months, Secretary Watkins has been instrumental in stimulating an ongoing national debate on the direction of the United States' energy policy as we enter the 21st Century. This debate is long overdue. But, unfortunately, we now find ourselves in the situation that the future of nuclear power in the United States has become inextricably entwined in finding remedies for the environmental and safety issues surrounding the Department's defense production complex.

If we are to be successful in dealing with the environmental, safety and health problems at these nuclear production facilities, then our effort must be founded on a commitment to excellence, competence and confidence. Only when and if the American people understand that our effort is formulated and implemented with a dedication to these principles can it be effective.

101st CONGRESS
1st Session

S. 972

To transfer to the Secretary of Health and Human Services the authority of the Secretary of Energy to conduct epidemiological studies of the effects of radiation, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MAY 11 (legislative day, JANUARY 3), 1989

Mr. WIRTH introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

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A BILL

To transfer to the Secretary of Health and Human Services the authority of the Secretary of Energy to conduct epidemiological studies of the effects of radiation, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Radiation Research Reorganization Act of 1989".

SEC. 2. FINDINGS.

The Congress makes the following findings:

(1) After many years of study there remain unresolved questions about the magnitude and nature of the risk to human health posed by exposure to radiation from sources such as nuclear bomb tests, the manufacture of nuclear weapons, residing near nuclear production facilities, nuclear power plants, and radioactive wastes, and the medical uses of nuclear materials.

(2) The risk to human health posed by present and future Department of Energy facilities is and must continue to be a crucial factor in decisions affecting these facilities. Informed decisions cannot be made without reliable and credible information on the risks to human health that may result.

(3) Public health authorities must be able to direct research and data collection efforts so that the true nature and magnitude of the past and present risk posed by human exposure to radiation can be determined, and so that effective means of protecting the public against dangerous exposure can be developed and implemented.

(4) The Secretary of Energy's responsibility for production of nuclear materials and weapons conflicts with the Secretary of Energy's responsibility under the Energy Reorganization Act of 1974 (42 U.S.C. 5801

et seq.), to study the health impacts of activities of the Department of Energy.

(5) There is considerable public doubt as to the integrity of health impact studies conducted by or on behalf of the Department of Energy. Past practices of the Department of Energy have amplified this doubt; ultimately, however, it stems from and is the inescapable consequence of the dual and conflicting responsibilities assigned to the Secretary of Energy. This doubt can be relieved only by reassigning the responsibility for epidemiological research into the health effects of exposure to radiation to an independent department of the government with no responsibility for the production or maintenance of nuclear weapons.

SEC. 3. DEFINITIONS.

For purposes of this Act:

(1) The term "epidemiological studies" means scientific studies of the incidence, distribution, and control of a disease or diseases in a population.

(2) The term "radiation release" means the routine or accidental release of a radionuclide into the workplace or the environment.

(3) The term "dose reconstruction" means the identification of the types and quantities of radionu-

clides to which an individual or a population is or has been exposed.

(4) The term "health risk assessment" means the determination of the magnitude and probability of actual or potential harm to the public health or environment.

(5) The term "related studies" means scientific studies, including health risk assessments and radiation release and dose reconstruction studies, which are undertaken as part of or in support of epidemiological studies into the health effects of exposure to radiation.

(6) The term "Department of Energy facilities" means facilities of the Department of Energy that are involved in the design, production, processing or reprocessing, assembly, fabrication, testing, storage, disassembly, or destruction of nuclear materials or weapons.

SEC. 4. TRANSFER.

(a) IN GENERAL.—(1) There is transferred to the Secretary of Health and Human Services the authority of the Secretary of Energy to conduct, under section 103 of the Energy Reorganization Act of 1974 (42 U.S.C. 5813) and any other law, epidemiological studies of the effects of exposure to radiation.

(2) In carrying out the function transferred by this subsection, the Secretary of Health and Human Services shall consult with—

(A) the Administrator of the Agency for Toxic Substances and Disease Registry;

(B) the Director of the Centers for Disease Control and the Director of the National Institute for Occupational Safety and Health;

(C) the Director of the National Institutes of Health and the Directors of the National Cancer Institute and of the National Institute of Environmental Health Sciences;

(D) the Commissioner of the Food and Drug Administration and the Director of the Center for Devices and Radiological Health; and

(E) the Directors of State Public Health Agencies of States in which a Department of Energy nuclear facility is located.

(b) ANCILLARY TRANSFERS.—There are transferred to the Secretary of Health and Human Services—

(1) the professional and administrative positions overseen;

(2) the property and records now being used or held;

(3) the obligations and commitments made; and

(4) the unexpended balances of appropriations, allocations, and other funds available (or to be made available) for use,

by the Secretary of Energy in connection with the function transferred by subsection (a).

(c) OMB REVIEW.—The Director of the Office of Management and Budget, at such time or times as the Director shall determine, shall make—

(1) such determinations as may be necessary with regard to the functions transferred by subsection (a); and

(2) such incidental dispositions of personnel, assets, liabilities, grants, contracts, property, records, and unexpended balances of appropriations, authorizations, allocations, and other funds held, used, arising from, available to, or to be made available in connection with such function,

as may be necessary to carry out the transfer of functions.

SEC. 5. STUDIES BY THE SECRETARY OF HEALTH AND HUMAN SERVICES.

(a) RESPONSIBILITIES OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES.—(1) The Secretary of Health and Human Services shall undertake a comprehensive program of epidemiological research, including related studies, into the health effects of exposure to radiation.

(2) The aim of the research program described in paragraph (1) shall be the identification of the nature and magnitude of the risk to the public and to the workforce of the Department of Energy resulting from Department of Energy activities.

(b) COORDINATION WITH STATE PUBLIC HEALTH AGENCIES.—The Secretary of Health and Human Services shall ensure that research activities are coordinated with appropriate State agencies responsible for public health.

SEC. 6. REPORTS BY THE SECRETARY OF ENERGY.

(a) REPORT OF AVAILABLE DATA AND RECORDS.—Not later than 60 days after the date of enactment of this Act, the Secretary of Energy shall prepare and submit to the Secretary of Health and Human Services and the Congress a complete listing of data and records held or maintained by the Department of Energy and of potential use in the conduct and evaluation of epidemiological and related studies.

(b) REPORT OF PAST LEVEL OF FUNDING.—Not later than 60 days after the date of enactment of this Act, the Secretary of Energy shall prepare and submit to the Secretary of Health and Human Services and the Congress a complete record of funds expended by the Department of Energy on research related to the health effects of exposure to radiation during each of the 5 years preceding the date of enactment of this Act.

SEC. 7. ACCESS TO DATA AND RECORDS.

(a) DEPARTMENT OF ENERGY DATA AND RECORDS.—(1) The Secretary of Energy shall provide to the Secretary of Health and Human Services or the Secretary's designees access to all data and records maintained or held by the Secretary of Energy and not transferred to the Department of Health and Human Services under section 4(b) if—

(A) such records are deemed by the Secretary of Health and Human Services to be useful to epidemiological research, health risk assessments, radiation release studies, or dose reconstruction studies; and

(B) the Secretary of Health and Human Services has taken such steps as shall be necessary to ensure the confidentiality of information pertaining to individuals who are the subjects of the records.

(2) Specifically included in the data and records to be made available by the Secretary of Energy to the Secretary of Health and Human Services or the Secretary's designees are data and records relating to worker health, worker exposure to radiation, and routine and accidental releases of radionuclides.

(3) Access to data and records described in paragraphs (1) and (2) shall be provided to the Secretary of Health and Human Services or the Secretary's designees within 30 days following receipt by the Secretary of Energy of a written request for access to data or records.

(4) The Secretary of Health and Human Services shall not grant access to any employee of the Department of Health and Human Services to classified material under paragraph (1) unless such employee possesses an appropriate security clearance and has a legitimate need to see the classified material in question.

(b) DEPARTMENT OF HEALTH AND HUMAN SERVICES DATA AND RECORDS.—The Secretary of Health and Human Services shall grant access to data and records held or developed by the Department of Health and Human Services, including data and records obtained from the Department of Energy, to the public in accordance with the established practices of the Department of Health and Human Services.

SEC. 8. FUNDING FOR THE DEPARTMENT OF HEALTH AND HUMAN SERVICES.

(a) LEVEL OF FUNDING.—The annual level of funding provided to the Department of Health and Human Services for the purpose of carrying out the responsibilities transferred in section 4(a) shall in no event be less than the greatest of the annual amounts reported by the Department of Energy pursuant to section 6(b).

(b) USE OF FUNDS.—Funds provided to the Department of Health and Human Services for the purposes of this Act may be used to support the direct and indirect costs of a program of epidemiological research, including related studies, into the health effects of exposure to radiation, and for such other uses as the Secretary may deem appropriate. Funds provided for the purposes of this Act may be used to support activities of State public health agencies that are compatible with the purposes of this Act.

SEC. 9. RADIATION RELEASE AND DOSE RECONSTRUCTION STUDIES AND HEALTH RISK ASSESSMENTS.

(a) STUDIES BY THE SECRETARY OF HEALTH AND HUMAN SERVICES.—The Secretary of Health and Human Services is authorized to undertake—

(1) such research and studies into radiation releases and dose reconstruction; and

(2) such health risk assessments,

as the Secretary may deem necessary in order to properly and fully carry out the duties transferred in section 4(a).

(b) REVIEW OF DEPARTMENT OF ENERGY STUDIES BY SECRETARY OF HEALTH AND HUMAN SERVICES.—The Secretary of Health and Human Services is authorized to review research and studies conducted by the Department of Energy after enactment of this Act relating to radiation releases, dose reconstruction, or health assessments.

SEC. 10. REVIEW OF EXISTING RESEARCH AND RECOMMENDATIONS.

(a) REVIEW OF RESEARCH INTO AND DATA RELATING TO HEALTH EFFECTS OF RADIATION.—(1) The Secretary of Health and Human Services shall conduct a comprehensive review of existing epidemiological studies and data relating to health effects of exposure to radiation.

(2) The review may include—

(A) studies conducted by the Department of Energy and its contractors;

(B) studies conducted by Federal, State, county, and local agencies;

(C) studies conducted by or on behalf of international organizations and foreign governments; and

(D) studies conducted by independent researchers, groups, companies, and private and public universities.

(3) The review shall—

(A) identify areas where additional research needs to be undertaken;

(B) establish priorities to be used in the allocation of resources to research activities; and

(C) make recommendations for specific research activities to be undertaken by the Department of Health and Human Services.

(4) The review shall be completed and submitted to the President and the Congress not later than 180 days after enactment of this Act.

(b) REVIEW OF HEALTH RISK ASSESSMENTS AND RADIATION RELEASES AND DOSE RECONSTRUCTION.—(1) The Secretary of Health and Human Services shall conduct a comprehensive review of existing and ongoing health risk assessments and of existing and ongoing studies relating to radiation releases and dose reconstruction efforts.

(2) The review may include—

(A) studies conducted by the Department of Energy and its contractors;

(B) studies conducted by Federal, State, county, and local agencies;

(C) studies conducted by or on behalf of international organizations and foreign governments; and

(D) studies conducted by independent researchers, groups, companies, and private or public universities.

(3) The review shall—

(A) identify areas where additional research needs to be undertaken;

(B) establish priorities to be used in the allocation of resources to research activities; and

(C) make recommendations for specific research activities to be undertaken by the Department of

Energy or the Department of Health and Human Services.

(4) The review shall be completed and submitted to the President and to Congress not later than 180 days after enactment of this Act.

SEC. 11. ADVISORY PANEL ON RADIATION RESEARCH.

(a) ESTABLISHMENT OF ADVISORY PANEL.—(1) To advise the Secretary of Health and Human Services in carrying out the function transferred by section 4(a) there is established an advisory panel, to be known as the "Advisory Panel on Radiation Research".

(2) The advisory panel shall consist of 9 members appointed by the President by and with the advice and consent of the Senate. Members of the panel shall be appointed within 90 days of enactment of this Act. At least 5 of the 9 members shall be from outside the Federal service. Among the 9 members of the panel, there shall be at least one representative of—

(A) organized labor unions active at the Department of Energy's nuclear facilities;

(B) the Secretary of Energy;

(C) public interest groups concerned about the health effects of radiation; and

(D) State public health departments and agencies of States having a Department of Energy nuclear facility in their territory.

(b) DUTIES OF THE PANEL.—(1) The Advisory Panel on Radiation Research shall ensure the development and dissemination of reliable and credible information on the true nature and magnitude of the past and present risk posed by human exposure to radiation.

(2) In carrying out paragraph (1), the advisory panel shall review and evaluate the content and implementation of the program of research by the Department of Health and Human Services into the health effects of exposure to radiation. The advisory panel shall make specific recommendations to ensure that the health of workers and of the general population is being adequately protected.

(c) EXPENSES OF MEMBERS.—(1) Except as provided in paragraph (2), members of the Advisory Panel on Radiation Research shall—

(A) be entitled to receive the daily equivalent of the annual rate of basic pay in effect for grade GS-18 of the General Schedule for each day, including traveltime, during which they are engaged in the actual performance of duties vested in the panel; and

(B) while away from their homes or regular places of business and while serving in the business of the panel, be entitled to receive transportation expenses as prescribed by section 5703 of title 5, United States Code.

(2) Members of the panel who are full-time officers or employees of the United States shall receive no additional pay, allowances, or benefits by reason of their service on the panel.

(d) ADMINISTRATIVE SUPPORT.—The Secretary of Health and Human Services shall provide such administrative support services as the advisory panel may reasonably request.

101st CONGRESS
1st Session

S. 1304

To enhance nuclear safety at Department of Energy nuclear facilities, to modify certain functions of the Defense Nuclear Facilities Safety Board, to apply the provisions of OSHA to certain Department of Energy nuclear facilities, to clarify the jurisdiction and powers of Government agencies dealing with nuclear wastes, to ensure independent research on the effects of radiation on human beings, to encourage a process of environmental compliance and cleanup at these facilities, to protect communities that contain these facilities, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JULY 12 (legislative day, JANUARY 3), 1989

Mr. GLENN (for himself, Mr. ADAMS, Mr. DASCHLE, Mr. DECONCINI, Mr. KOHL, Mr. LIEBERMAN, Mr. METZENBAUM, Ms. MIKULSKI, Mr. PRYOR, and Mr. STEVENS) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

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A BILL

To enhance nuclear safety at Department of Energy nuclear facilities, to modify certain functions of the Defense Nuclear Facilities Safety Board, to apply the provisions of OSHA to certain Department of Energy nuclear facilities, to clarify the jurisdiction and powers of Government agencies dealing with nuclear wastes, to ensure independent research on the effects of radiation on human beings, to encourage a process of environmental compliance and cleanup at these facilities, to protect communities that contain these facilities, and for other purposes.

★(Star Print)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE

This Act may be cited as the "DOE Nuclear Safety and Environment Act".

SEC. 2. FINDINGS.

The Congress finds that—

(1) the operation of the Department of Energy nuclear weapons facilities suffers from many significant problems, including an overall emphasis on production at the expense of safety and the environment;

(2) there is a significant need to upgrade the emphasis on safe operation at these facilities; and

(3) there is an overriding need to bring these facilities into compliance with environmental law, and to clean up hazardous wastes, including toxic and radioactive wastes at these facilities.

TITLE I—OVERSIGHT OF DEFENSE NUCLEAR FACILITIES SAFETY BOARD

SEC. 101. DEPARTMENT OF ENERGY DEFENSE NUCLEAR FACILITY.

Section 318 of chapter 21 of the Atomic Energy Act of 1954 is amended by—

(1) amending paragraph (1) to read as follows:

"(1) A production facility or utilization facility (as defined in section 11 of this Act) that is under the control or jurisdiction of the Secretary of Energy and that is operated for national security purposes (such term includes the tritium loading facility at Savannah River, South Carolina, the 236 H facility at Savannah River, South Carolina, and the Mound Laboratory, Ohio), but the term does not include—

"(A) any facility or activity covered by Executive Order No. 12344, dated February 1, 1982, pertaining to the Naval nuclear propulsion program;

"(B) any facility or activity involved with the transportation of nuclear explosives or nuclear material; or

"(C) any facility that does not conduct atomic energy defense activities."; and

(2) adding at the end thereof the following:

"(3) A testing and assembly facility that is under the control or jurisdiction of the Secretary of Energy and that is operated for national security purposes, including the test site facility in Nevada, the Pinnellas Plant, Florida, and the Pantex facility, Texas.".

SEC. 102. PROTECTION OF MEMBERS OF BOARD.

Section 311(b) of chapter 21 of the Atomic Energy Act of 1954 is amended by adding at the end thereof the following:

"(5) Any member of the Board may be removed by the President only for inefficiency, neglect of duty, or malfeasance in office.".

SEC. 103. REPORT OF ABNORMAL OCCURRENCES BY THE SECRETARY OF ENERGY.

The Secretary of Energy shall immediately notify the Defense Nuclear Facilities Safety Board and the Congress in the case of any abnormal occurrence at a Department of Energy defense nuclear facility (as defined in section 318 of the Atomic Energy Act of 1954) which could result in an unplanned release of a quantity of radioactive products in excess of the allowable limits for normal operation.

TITLE II—APPLICATION OF OSHA AND NIOSH TO DOE NUCLEAR FACILITIES

SEC. 201. FINDINGS AND PURPOSE.

(a) FINDINGS.—Congress finds that—

(1) worker health and safety at Department of Energy nuclear facilities could be made substantially safer by applying the standards developed by experts in the field of occupational health and safety;

(2) the Secretary of Labor has a longstanding responsibility for the health and safety of workers (including the enforcement of occupational health and safety standards and other protective labor standard programs) and could provide substantial assistance in developing, improving, and enforcing the standards at Department of Energy nuclear facilities; and

(3) the Secretary of Health and Human Services has a continuing responsibility for evaluating health and safety needs related to radiation and toxic substances standards and could provide substantial assistance in improving and enforcing the standards at Department of Energy nuclear facilities.

(b) PURPOSE.—The purpose of this title is to improve and enforce standards for employee health and safety at Department of Energy nuclear facilities.

SEC. 202. APPLICATION OF OSHA TO DOE NUCLEAR FACILITIES.

(a) GENERAL RULE.—Section 4(b)(1) of the Occupational Safety and Health Act of 1970 (29 U.S.C. 653(b)(1)) is amended—

(1) by striking out "Nothing" and inserting in lieu thereof "(A) Except as provided in subparagraph (B), nothing"; and

(2) by adding at the end thereof the following new subparagraph:

"(B)(i) Notwithstanding any other provision of this Act, this Act shall apply with respect to employment performed in—

"(I) a Department of Energy defense nuclear facility (as defined in section 318 of the Atomic Energy Act of 1954) and a production facility or utilization facility (as defined in section 11 of the Atomic Energy Act of 1954) under the control or jurisdiction of the Secretary of Energy;

"(II) a facility subject to such Act (42 U.S.C. 2011 et seq.) under the control or jurisdiction of the Secretary of Energy; and

"(III) a waste storage or disposal facility under the control of or jurisdiction of the Secretary of Energy.

"(ii) This subparagraph shall not apply to a facility or activity covered under Executive Order 12344 (42 U.S.C. 7158 note).".

(b) REGULATIONS AND STANDARDS.—

(1) CURRENT REGULATIONS AND STANDARDS.— All regulations and standards relating to occupational health and safety applicable to Department of Energy nuclear facilities described in section 4(b)(1)(B)(i) of the

Occupational Safety and Health Act of 1970 (as amended by subsection (a)) that are in effect on the date of enactment of this Act shall remain in effect until superseded by regulations and standards promulgated by the Secretary of Labor in accordance with paragraph (2).

(2) REVISED REGULATIONS AND STANDARDS.—The Secretary of Labor shall promulgate specific regulations to govern the application of such Act to such Department of Energy nuclear facilities. The regulations shall include—

(A) the occupational health and safety standards to be applied to such facilities; and

(B) the manner and process for enforcement of the standards, which shall include provisions for—

(i) the safeguarding of information, consistent with the needs of employees of the Occupational Safety and Health Administration;

(ii) mechanisms and processes for enforcement, including the right of entry for unannounced inspections without probable cause;

(iii) receipt of complaints from individuals and protection of the individuals from retribution for making the complaints;

(iv) procedures for inspection at such facilities not less than once each year; and

(v) such other regulations as are necessary to carry out this title and the amendments made by this title.

SEC. 203. PERFORMANCE OF NIOSH FUNCTIONS AT DOE NUCLEAR FACILITIES.

Section 22 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 671) is amended by adding at the end thereof the following new subsection:

"(g)(1) Notwithstanding any other provision of this Act, the Director and the Institute shall perform functions authorized by this Act at Department of Energy nuclear facilities described in section 4(b)(1)(B)(i).

"(2) The Institute shall conduct hazard evaluations at such facilities, including ionizing radiation evaluations.".

SEC. 204. COOPERATION WITH INSPECTIONS AND INVESTIGATIONS.

Section 8 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 657) is amended by adding at the end thereof of the following new subsection:

"(h)(1) Except as provided in paragraph (2), the Secretary of Energy and each contractor operating a nuclear facility described in section 4(b)(1) shall—

"(A) cooperate with the Secretary of Labor and the Secretary of Health and Human Services in the conduct of an inspection or investigation under this Act at such facility;

"(B) grant access to such facility to enable the conduct of such inspection or investigation; and

"(C) provide all information that is necessary to conduct such inspection or investigation.

"(2) To protect the confidentiality of information, the Secretary of Energy may deny access to any person who—

"(A) has not been granted a security clearance or access authorization by the Secretary; or

"(B) does not require such access in connection with the duties of such person to enforce this Act.".

TITLE III—MIXED HAZARDOUS WASTE

SEC. 301. SHORT TITLE.

This title may be cited as the "Mixed Hazardous Waste Amendment Act of 1989".

SEC. 302. FINDINGS.

The Congress finds that—

(1) the generation, transportation, treatment, storage, and disposal of solid waste mixed with radioactive material poses potential hazards to public health, safety, and environment unless carefully planned and managed;

(2) the Department of Energy's facilities are actual or potential producers of such solid waste mixed with radioactive material; and

(3) the authority of the Environmental Protection Agency and authorized States to regulate the disposal of solid waste mixed with radioactive material at the Department of Energy's facilities should be clarified.

SEC. 303. PURPOSE.

The purpose of this title is to clarify the intent of Congress that the generation, transportation, treatment, storage, and disposal of solid waste mixed with radioactive material at the Department of Energy facilities, including facilities not licensed for the disposal of radioactive materials is subject to the Solid Waste Disposal Act (42 U.S.C. 6901 et seq.), in addition to existing authority under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.).

SEC. 304. CLARIFYING AMENDMENT TO DEFINITION OF SOLID WASTE.

Section 1004(27) (42 U.S.C. 6903(27)) of the Solid Waste Disposal Act is amended—

(1) by inserting "(A)" after "(27)";

(2) by striking out ", or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923)"; and

(3) by adding at the end thereof the following new subparagraph:

"(B) The term 'solid waste' does not include—

"(i) source, special nuclear, or by-product materials as defined in section 11 of the Atomic Energy Act of 1954 (42 U.S.C. 2014), unless such materials are a part of any mixture or combination, if the other constituent part of such mixture or combination is a solid waste, within the meaning of subparagraph (A); or

"(ii) wastes at the time they are emplaced at a repository, as defined in section 2(18) of the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10101(18)).".

SEC. 305. APPLICABILITY OF AMENDMENTS.

This title and the amendments made thereby—

(1) are clarifying in nature with respect to the purpose stated in section 303; and

(2) shall not be construed as—

(A) altering existing Department of Energy authority to regulate source, special nuclear, or by-product materials when in a mixture or combination with a solid waste; or

(B) affecting, modifying, or amending the Uranium Mill Tailings Radiation Control Act of 1978.

TITLE IV—THE RADIATION RESEARCH BOARD

SEC. 401. SHORT TITLE.

This title may be cited as the "Radiation Research Board Act".

SEC. 402. FINDINGS.

The Congress makes the following findings:

(1) After many years of study there remain unresolved questions about the health effects of radiation exposure from many sources, including nuclear weapons manufacturing and testing, nuclear reactors, radioactive wastes, and the medical uses of nuclear materials.

(2) Radiation-caused injury and disease, including cancer, birth defects, and genetic damage, must be further examined and better understood.

(3) Public health authorities must be able to direct research efforts on the health effects of radiation so that effective means of protecting the public against

dangerous exposure to radiation can be developed and achieved.

(4) The Secretary of Energy is primarily responsible for the production of nuclear materials and nuclear weapons. In addition, the Secretary is required to study the health impact of activities of the Department of Energy. These dual responsibilities have the potential to create public concern as to the integrity and value of the health studies conducted by the Secretary of Energy.

(5) The Department of Energy is in possession of extensive information and data pertaining to the health effects of radioactive and other hazardous materials which should be made more widely available to well-qualified researchers.

SEC. 403. ADVISORY BOARD.

(a) IN GENERAL.—

(1) ESTABLISHMENT.—To advise and assist the Secretary of Energy in conducting studies of the effects of radiation under section 103 of the Energy Reorganization Act of 1974 (42 U.S.C. 5813), and any other law, the Secretary of Health and Human Services shall establish an advisory board known as the Radiation Research Board (hereafter in this title referred to as the "Board").

(2) MEMBERSHIPS.—

(A) APPOINTMENT.—The Board shall consist of 8 members appointed by the Secretary of Health and Human Services, 1 member appointed by the Secretary of Energy, and 2 members appointed by the Secretary of Labor. The Secretary of Health and Human Services shall make appointments to the Board so that the membership of the Board includes individuals who are expert in the health effects of radiation, epidemiology, or toxicology, and public health officials who are concerned with such health effects.

(B) CONSULTATION.—The Secretary of Health and Human Services shall consult with the Director of the Centers for Disease Control, the Director for the National Institute for Occupational Safety and Health, the Director of the National Cancer Institute, the Director of the Center for Devices and Radiological Health, the Director of the National Institute of Environmental Health Sciences, and others in formulating the membership of the Board.

(b) LIMIT ON EXPENDITURES BY SECRETARY OF ENERGY.—

(1) SUBMISSIONS TO BOARD.—Prior to any authorization or expenditure of funds in an amount greater than $50,000 by the Secretary of Energy for studies of the health effects of radiation, the Secretary of Energy shall provide the Board with all proposals concerning such studies.

(2) REVIEW BY BOARD.—The Board shall review the proposals provided under paragraph (1) and make appropriate recommendations to the Secretary of Energy in writing if the Board believes the proposal should be modified or not funded.

(3) ANNUAL REPORTS BY SECRETARY.—The Secretary of Energy shall annually report to the Congress concerning the implementation of the recommendations of the Board. Such reports shall include specific reasons for each decision by the Secretary not to implement a recommendation made by the Board.

(4) ANNUAL REVIEW BY BOARD.—The Board shall annually review the studies conducted pursuant to this title, and advise the Secretary of Energy as to the suggested scope and direction of future studies needed.

(5) REQUIREMENT OF PEER REVIEW.—The Secretary of Energy, with the assistance of the Board, shall—

(A) insure that all studies undertaken under this title shall be subject to peer review; and

(B) promulgate guidelines for the provision of data from such studies to qualified researchers who are not associated with the Department of Energy in order to implement subparagraph (A).

(c) FUNDING AND STAFFING.—The Secretary of Health and Human Services shall provide such funds, facilities, and staff as are necessary for the Board.

SEC. 404. PUBLIC ACCESS TO FEDERAL DATA PERTAINING TO THE HEALTH EFFECTS OF RADIOACTIVE AND OTHER HAZARDOUS MATERIALS IN THE POSSESSION OF THE DEPARTMENT OF ENERGY.

(a) IN GENERAL.—The Secretary of Energy shall make any data pertaining to the health effects of radioactive and other hazardous materials in the possession of the Department of Energy or its contractors available to qualified researchers.

(b) STANDARDS.—The Radiation Research Board, in consultation with the Secretary of Energy, shall establish procedures to expedite the release of data pursuant to this section.

TITLE V—OFFICE OF ENVIRONMENT, SAFETY, AND HEALTH WITHIN THE DEPARTMENT OF ENERGY

SEC. 501. OFFICE OF ENVIRONMENT, SAFETY, AND HEALTH.

There shall be within the Department of Energy an Office for Environment, Safety, and Health which shall be headed by an Assistant Secretary who shall be one of the Assistant Secretaries appointed as provided in section 203 of the Department of Energy Organization Act (42 U.S.C. 7133). In addition to such other functions as may be assigned by the Secretary of Energy to the Assistant Secretary for Environment, Safety, and Health under section 203 of such Act, the Assistant Secretary shall have the following specific authorities and responsibilities:

(1) To—

(A) annually review conformance of the Department's activities with all applicable environmental laws and regulations so as to protect the health and safety of workers and the public; and

(B) annually report to the Secretary on the status of conformance and the status of Department's efforts to ensure that—

(i) national environmental protection goals are incorporated into the formulation and implementation of energy programs;

(ii) environmental and safety concerns are identified, prioritized and addressed through corrective and remedial actions; and

(iii) areas of environmental and safety risk are reduced.

(2) To provide liaison with other Federal agencies, including the Environmental Protection Agency, concerning regulatory efforts and specific actions of those agencies that may have an effect upon the Department operations.

(3) To act as an advocate and spokesman for the Department's positions on environmental, safety, and quality assurance issues.

(4) To represent the Department on interagency, national and international environmental and safety committees, and working groups.

(5) To exercise independent review and approval of environmental impact statements prepared by the Department pursuant to the National Environmental Policy Act.

(6) To exercise concurrence authority with respect to the safety related aspects of the construction and

initial operating authorizations for reactors, high hazard, and selected moderate hazard nuclear facilities.

(7) To monitor compliance so as to reduce areas of environmental, safety, and health risks.

(8) To require the immediate shutdown of any Department of Energy facility that poses an unreasonable environmental, safety, or health risk.

(9) To undertake any other responsibilities at the direction or delegation of the Secretary.

TITLE VI—DEFENSE NUCLEAR FACILITY CLEANUP COMPLIANCE AGREEMENTS

SEC. 601. DEFENSE NUCLEAR FACILITY CLEANUP COMPLIANCE AGREEMENTS

(a) IN GENERAL.—(1) Not later than 18 months after the date of enactment of this Act—

(A) the Administrator of the Environmental Protection Agency;

(B) the Secretary of Energy; and

(C) each State containing a Department of Energy defense nuclear facility (as defined by section 318 of the Atomic Energy Act of 1954),

shall negotiate a defense nuclear facility cleanup agreement as provided in subsection (b).

(2) Nothing in this section shall be construed as affecting or requiring the modification of any agreement entered into before the date of enactment of this Act.

(b) CONTENT OF AGREEMENT.—The compliance agreement referred to in subsection (a) shall, with respect to each Department of Energy defense nuclear facility, contain—

(1) the best possible inventory of past and current environmental problems at the facility that require cleanup and abatement;

(2) a schedule for remediation with milestones, deadlines, and budget quality data; and

(3) an agreement as to the type of notice which shall be given if there are any releases at the facility which violate the agreement or environmental law.

(c) NOTICE TO CONGRESS UPON FAILURE TO REACH AGREEMENT.—If an agreement cannot be reached as provided in subsections (a) and (b) 18 months after the date of enactment of this Act, the Secretary of Energy shall—

(i) immediately notify the Congress of the failure to reach agreement; and

(ii) include in such notice an explanation of why the negotiations failed by the Secretary and any State involved in the negotiations for such agreement (if such

State notifies the Secretary that the State wants to include such an explanation).

(d) AGREEMENTS ENFORCED AS CONSENT DECREES.—Any agreement entered into under this section shall be entered and enforced as a consent decree.

TITLE VII—REPEAL OF PROHIBITION ON THE USE OF FUNDS TO PAY PENALTIES UNDER ENVIRONMENTAL LAWS

SEC. 701. REPEAL OF PROHIBITION.

Section 3132 of Public Law 99-661 is repealed.

TITLE VIII—DEPARTMENT OF ENERGY FACILITY CLOSING RESTRICTIONS

SEC. 801. DEPARTMENT OF ENERGY FACILITY CLOSING RESTRICTIONS.

Upon closing any Department of Energy defense nuclear facility (as defined by section 318 of the Atomic Energy Act of 1954), the Secretary must provide—

(1) a complete survey of environmental problems at the facility;

(2) budget quality data indicating the cost of returning the facility to an environmentally safe multiuse condition; and

(3) a report to the Congress on the cost and proposed schedule of the facility's cleanup, and how the Department of Energy intends to initiate and complete the cleanup.

STATEMENT OF HON. JOHN GLENN, U.S. SENATOR FROM OHIO

Senator GLENN. Thank you, Mr. Chairman. I appreciate the opportunity to testify and discuss S. 1304, which I submitted. Senators Adams, Cranston, Kohl, Lieberman, Metzenbaum, Mikulski, Pryor, Reid, and Stevens have joined me as cosponsors of this bill.

It is designed to strengthen independent environmental safety and health oversight of the U.S. Department of Energy's very massive nuclear weapons production complex. It is the product of several years of oversight and investigation by Congress and over 30 reports by the General Accounting Office, as well as numerous outside and internal agency reviews.

Mr. Chairman, the controls inside DOE are being established by Secretary Watkins, but the question arises how permanent will those changes be. With the importance of these programs, we know of the dire consequences of any mistakes that may occur. If there is no internal DOE problem, then there will be no problem in having some extra oversight, as I see it.

If the patterns of nearly 40 years of questionable performance in these nuclear weapons programs and the secret status in which they were all that time still prevail, however, then I would submit that we will certainly need what in effect is a second opinion that the board can provide. It could be crucial.

Now most recently, DOE's Inspector General has issued a report done at my request which has uncovered yet another major set of problems involving DOE's system of contractor indemnification. The IG found that DOE has had to pay millions of dollars in public funds which were fraudulently spent, and the Energy Department cannot require contractor employees to be fired for behavior that even jeopardizes public health and safety.

Moreover, in direct conflict with Congressional intent, the IG has found that contractors can pass civil and criminal penalties levied against them under recent amendments to the Price/Anderson Act onto the DOE to pay, and we then pay taxpayers' dollars out for those purposes.

In short, contract practices which are unacceptable by other Federal agencies and by the business community are commonplace in DOE's management and operating contracts. That has been routine, and it just came to light.

These efforts by the IG and others have all pointed to a fundamental failure by the Federal nuclear program to adapt to the changes in public accountability and environmental safety and health protection that have evolved in our society since the end of World War II. Because of this structural problem, I felt obligated to introduce my legislation.

Today you will be hearing from Energy Secretary Watkins. I will say going in that I am one of his biggest admirers. He is a dynamic individual who has taken several important initiatives which I very strongly support. Under Admiral Watkins' leadership, environment safety and health is being put first even before production. It has to be considered up front.

So DOE's longstanding system of secrecy and decentralized management is undergoing very positive changes, and I applaud him for doing exactly that.

Secretary Watkins is also taking steps to broaden access to radiation health records on hundreds of thousands of Federal contract workers.

These efforts are all worthy of our support. As legislators, however, we have to address the long-term institutional problems. No matter who is in that job, we have to set up a long-term institutional problems that have precipitated DOE's crisis and which can persevere long after the tenure of any administration.

Given the enormity of DOE's problems and strong resistance to change inherent in DOE's nuclear weapons program, it is clear that Congress must look to the future. We must protect the public from any tendency by future administrations to drift back into the unacceptable situation we now face.

I would like to assume that Secretary Watkins will change this whole thing around, but even Secretary Watkins tells us repeatedly that his biggest problem is changing the mindset, changing the attitude within DOE. That is something we can help out on by helping with some of these long-term institutional changes no matter who the Secretary of Energy may be.

I would point out that the average tenure for a DOE secretary is about 2 years, so perhaps if Admiral Watkins was able to remain in the DOE for 20 years I would not feel the urgency to introduce this legislation. People come and people go in Washington, and we find that DOE's problems not only persist but thrive in the absence of structural changes in the law.

That is why we must assure that there will be a lasting framework of accountability embodied in law to assure that the mistakes of the past will not be repeated. The legislation I have submitted provide such a framework.

Briefly, S. 1304 contains eight titles.

No. 1 would strengthen the DOE Defense Facility Safety Board by adding facilities under their jurisdiction or under their surveillance excluded by Congress last year requiring timely and open reporting of unusual occurrences and establishing a clear criteria for removal of board members.

No. 2 would require OSHA and NIOSH, Occupational Safety and Health Administration and the National Institute for Occupational Safety and Health, to regulate and oversee worker safety and health in DOE facilities the same as all other factories, the same as all other institutions in and out of government. There is no reason why they should not be able to do that.

No. 3 requires mixed waste containing radioactive and nonradioactive substances which are generated at DOE facilities to be regulated under the Resource Conservation Recovery Act. That once again applies to all other facilities both in and out of government. There is no reason why it should not apply here.

No. 4 establishes a radiation research advisory board whose members are picked mainly by the Secretary of Health and Human Services to oversee and review the conduct of DOE's radiation health effects research. We do that because these results apply to many other jurisdictions, industrial as well as government, in addition to DOE.

No. 5 codifies DOE's Office of Environment Safety and Health and spells out specific functions and duties of this office.

I might add that the ESH was put in only after a number of Senate hearings both here and in the Governmental Affairs Committee. We pushed a long time to get that established over there, and it could just as easily be disestablished by some future Secretary of Energy. So we think that should be made statutory, codified.

No. 6 would require DOE, the affected states and the Environmental Protection Agency to conclude environmental compliance and clean-up agreements which are enforceable by consent decrees. We set an 18-month deadline for enactment of that legislation.

I might add that our attorney general in the State of Ohio took the lead in working out some of those consent decree processes. It was a rather landmark effort that he put forth. Other states have come and talked to him about how they can do the same thing. We think this is very doable. DOE agreed with him. They came to agreement on this, and it was a landmark effort that he put forward.

No. 7 would repeal a prohibition attached to the fiscal year 1988 DOD authorization bill which interferes with DOE's ability to pay penalties assessed for environmental noncompliance.

The last title then requires the Secretary of Energy upon closing a DOE facility to provide Congress with a complete survey of environmental problems, budget quality data, and a schedule for site clean-up so that we will know what to do as some of these facilities are closed down.

All of these things together, in effect, give a good combination. It gives a second opinion that will be institutionalized in the future. So I view this combination of effective internal accountability and independent external oversight as mutually reinforcing. I feel that both are vitally necessary if we are going to create a lasting and positive change. That is what the Secretary is trying to do, and I think this will help him.

I know that he would probably just as soon not have some of these things, but as responsible legislators we have to see that things like that apply to whoever happens to be in that job go into the future so that we do not find some future secretary giving less attention to this than we know that Secretary Watkins is doing.

I would be glad to answer any questions, Mr. Chairman. Thank you.

[The prepared statement of Senator Glenn follows.]

STATEMENT OF SENATOR JOHN GLENN
BEFORE THE SENATE ENERGY AND NATURAL RESOURCES COMMITTEE
REGARDING
S.1304: THE DEPARTMENT OF ENERGY NUCLEAR SAFETY AND ENVIRONMENT ACT

OCTOBER 5, 1989

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE, I APPRECIATE THE OPPORTUNITY TO TESTIFY AND DISCUSS MY LEGISLATION, S.1304. SENATORS ADAMS, CRANSTON, KOHL, LEIBERMAN, METZENBAUM, MIKULSKI, PRYOR, REID AND STEVENS HAVE JOINED ME AS COSPONSORS OF THIS BILL AS WELL. MY BILL IS DESIGNED TO STRENGTHEN INDEPENDENT ENVIRONMENTAL, SAFETY, AND HEALTH OVERSIGHT OF THE U.S. DEPARTMENT OF ENERGY'S MASSIVE NUCLEAR WEAPONS PRODUCTION COMPLEX. IT IS THE PRODUCT OF SEVERAL YEARS OF OVERSIGHT AND INVESTIGATION BY CONGRESS, OVER 30 REPORTS BY THE GENERAL ACCOUNTING OFFICE, AS WELL AS NUMEROUS OUTSIDE AND INTERNAL AGENCY REVIEWS.

MOST RECENTLY, THE DOE'S INSPECTOR GENERAL HAS ISSUED A REPORT, DONE AT MY REQUEST, WHICH UNCOVERED YET ANOTHER MAJOR SET OF PROBLEMS INVOLVING DOE'S SYSTEM OF CONTRACTOR INDEMNIFICATION. THE IG FOUND THAT DOE HAS HAD TO PAY MILLIONS OF DOLLARS IN PUBLIC FUNDS WHICH WERE FRAUDULENTLY SPENT. THE ENERGY DEPARTMENT CANNOT REQUIRE CONTRACTOR EMPLOYEES TO BE FIRED FOR BEHAVIOR THAT JEOPARDIZES PUBLIC HEALTH AND SAFETY. MOREOVER, IN DIRECT CONFLICT WITH CONGRESSIONAL INTENT, THE IG HAS FOUND THAT CONTRACTORS CAN PASS CIVIL AND CRIMINAL PENALTIES LEVIED AGAINST THEM, UNDER RECENT AMENDMENTS TO THE PRICE/ANDERSON ACT, ON TO DOE TO PAY. IN SHORT, CONTRACT PRACTICES THAT ARE UNACCEPTABLE BY OTHER FEDERAL AGENCIES AND BY THE BUSINESS COMMUNITY ARE COMMONPLACE IN DOE'S MANAGEMENT AND OPERATING CONTRACTS.

THESE EFFORTS BY THE IG AND OTHERS HAVE ALL POINTED TO A FUNDAMENTAL FAILURE BY THE FEDERAL NUCLEAR PROGRAM TO ADAPT TO THE CHANGES IN PUBLIC ACCOUNTABILITY AND ENVIRONMENTAL, SAFETY AND HEALTH PROTECTION THAT HAVE EVOLVED IN OUR SOCIETY SINCE THE END OF WORLD WAR II. BECAUSE OF THIS STRUCTURAL PROBLEM, I HAVE FELT OBLIGATED TO INTRODUCE MY LEGISLATION.

TODAY YOU WILL BE HEARING FROM ENERGY SECRETARY WATKINS -- A DYNAMIC INDIVIDUAL WHO HAS TAKEN SEVERAL IMPORTANT

INITIATIVES WHICH I STRONGLY SUPPORT. UNDER ADMIRAL WATKINS'S LEADERSHIP, ENVIRONMENT, SAFETY AND HEALTH IS BEING PUT FIRST BEFORE PRODUCTION. THE DOE'S LONG-STANDING SYSTEM OF SECRECY AND DECENTRALIZED MANAGEMENT IS UNDERGOING POSITIVE CHANGES. SECRETARY WATKINS ALSO IS TAKING STEPS TO BROADEN ACCESS TO RADIATION HEALTH RECORDS ON HUNDREDS OF THOUSANDS OF FEDERAL CONTRACT WORKERS.

THESE EFFORTS ARE ALL WORTHY OF OUR SUPPORT. HOWEVER, AS LEGISLATORS, WE MUST ADDRESS LONG-TERM INSTITUTIONAL PROBLEMS THAT HAVE PRECIPITATED THE DOE'S CRISIS AND WHICH CAN PERSERVERE LONG AFTER THE TENURE OF ANY ADMINISTRATION. GIVEN THE ENORMITY OF DOE'S PROBLEMS AND STRONG RESISTANCE TO CHANGE INHERENT IN THE DOE'S NUCLEAR WEAPONS PROGRAM, IT IS CLEAR THAT CONGRESS MUST PROTECT THE PUBLIC FROM ANY TENDENCY BY FUTURE ADMINISTRATIONS TO DRIFT BACK INTO THE UNNACCEPTABLE SITUATION WE NOW FACE.

THE AVERAGE TENURE FOR A DOE SECRETARY IS ABOUT TWO YEARS. PERHAPS IF ADMIRAL WATKINS WAS ABLE TO REMAIN AT DOE FOR 20 YEARS, I WOULD NOT FEEL THE URGENCY TO INTRODUCE THIS LEGISLATION. BUT AS PEOPLE COME AND PEOPLE GO IN WASHINGTON, WE FIND THAT DOE'S PROBLEMS NOT ONLY PERSIST BUT THRIVE IN THE ABSENCE OF STRUCTURAL CHANGES IN THE LAW.

THAT IS WHY WE MUST ASSURE THAT THERE WILL BE A LASTING FRAMEWORK OF ACCOUNTABILITY EMBODIED IN LAW TO ASSURE THAT THE MISTAKES OF THE PAST WON'T BE REPEATED. MY BILL PROVIDES SUCH A FRAMEWORK. BRIEFLY, S.1304 CONTAINS EIGHT TITLES WHICH:

(1) STRENGTHENS THE DOE DEFENSE FACILITY SAFETY BOARD BY ADDING FACILITIES EXCLUDED BY CONGRESS LAST YEAR, REQUIRING TIMELY AND OPEN REPORTING OF UNUSUAL OCCURRENCES AND ESTABLISHING A CLEAR CRITERIA FOR REMOVAL OF BOARD MEMBERS.

(2) REQUIRES THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND THE NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEEALTH TO REGULATE AND OVERSEE WORKER SAFETY AND HEALTH AT DOE FACILITIES.

(3) REQUIRES MIXED WASTES CONTAINING RADIOACTIVE AND NON-RADIOACTIVE SUBSTANCES WHICH ARE GENERATED AT DOE FACILITIES TO BE REGULATED UNDER THE RESOURCE CONSERVATION AND RECOVERY ACT.

(4) ESTABLISHES A "RADIATION RESEARCH ADVISORY BOARD" WHOSE MEMBERS ARE PICKED MAINLY BY THE SECRETARY OF HEALTH AND

HUMAN SERVICES TO OVERSEE AND REVIEW THE CONDUCT OF DOE'S RADIATION HEALTH EFFECTS RESEARCH.

(5) CODIFIES THE DOE'S OFFICE OF ENVIRONMENT, SAFETY AND HEALTH AND SPELLS OUT SPECIFIC FUNCTIONS AND DUTIES OF THIS OFFICE.

(6) REQUIRES DOE, AFFECTED STATES AND THE ENVIRONMENTAL PROTECTION AGENCY TO CONCLUDE ENVIROBNMENTAL COMPLIANCE AND CLEAN UP AGREEMENTS WHICH ARE ENFORCEABLE BY CONSENT DECREES AFTER 18 MONTHS OF ENACTMENT.

(7) REPEALS A PROHIBITION ATTACHED TO THE FY 1988 DOD AUTHORIZATION BILL WHICH INTERFERES WITH DOE'S ABILITY TO PAY PENALTIES ASSESSED FOR ENVIRONMENTAL NON-COMPLIANCE.

(8) REQUIRES THE SECRETARY OF ENERGY, UPON CLOSING A DOE FACILITY TO PROVIDE CONGRESS A COMPLETE SURVEY OF ENVIRONMENTAL PROBLEMS, BUDGET QUALITY DATA AND A SCHEDULE FOR SITE CLEAN UP.

I VIEW THIS COMBINATION OF EFFECTIVE INTERNAL ACCOUNTABILITY AND INDEPENDENT, EXTERNAL OVERSIGHT AS MUTUALLY REINFORCING. BOTH ARE VITALLY NECESSARY IF WE ARE GOING TO CREATING LASTING AND POSTIVE CHANGE.

Senator FORD. Do any of my colleagues have any questions for Senator Glenn?

Senator WIRTH. Senator, if I might?

Senator FORD. Senator Wirth.

Senator WIRTH. Senator Glenn, you have been after this set of rearrangements for a long time and I, as you know, have always supported those and believe it is absolutely imperative that we make some shifts in responsibility within the administration.

The Secretary, however, has said over and over and over again, even this Secretary, has said that he "will not make any changes at all organizationally."

Now, given that statement, what do we do? It seems to me that we have gotten to a point where it is very clear that we have got to shift at least the health aspects of this out of the Department of Energy. Secretary Watkins is adamant about not making that kind of a change, in fact, he has stated that transferring the program is totally unacceptable.

So what do we do?

Senator GLENN. Well, I think we transfer it out. I have favored that. And this is not a slap at Secretary Watkins at all.

As I said, I do not have any question in my own mind at all that if Secretary Watkins was going to remain there, this is going to get the proper attention.

But we have seen in the past with other secretaries, and even back before there was a DOE, that these things did not get the proper attention. And these radiation standards and health concerns go not only within the DOE nuclear weapons complex, but we have the nuclear power plants, the civilian power plants outside. We have other nuclear concerns across country—experiments, research. And what we do will apply to all of these.

And that is the reason why I think it should be independent. Certainly, DOE deserves a full consideration and hearing of their views in this regard. But I think the control of it should be outside.

The track record of DOE, going back years and years, before Secretary Watkins, is not good in this respect. And so, I think we need a broader control in this area.

Senator WIRTH. Does that mean moving on legislation regarding health research, and does that come out of Government Operations?

Senator GLENN. Moving this out is part of the legislation I am proposing, the 1304. I believe you addressed some of this also, do you not, in your legislation?

Senator WIRTH. Right. So that means moving quite quickly then, in terms of legislation?

Senator GLENN. Your bill?

Senator WIRTH. Either way.

Senator GLENN. Yes. Ours is already—I have already submitted this one. That is before this committee now. So that is included in this legislation. Is that what you meant?

Senator WIRTH. Yes. Thank you very much.

Senator GLENN. Thank you.

The CHAIRMAN [presiding]. Senator Glenn, I want to apologize for being a little late. I spoke to a science group for Lawton Chiles this morning. As I told Lawton, I would do that only for him. So, I am sorry to miss the early part of your statement.

Senator **GLENN**. That is a good effort we are interested in also.

The **CHAIRMAN**. But we will very carefully take your bill and your concerns to heart, and I hope be able to legislate in a way that is successful for the country and consistent with your wishes. Thank you very much.

Senator **DOMENICI**. Senator, could I ask you just one question?

In your committee, you have looked at the past in terms of the safety activities of DOE in this area that we are speaking about here. Have you by any chance, or do you recall a summary of the funding for the safety aspects of the Department of Energy last, let us say 4 or 5 years, administration request versus congressional funding?

Senator **GLENN**. I do not recall specific figures, but I would certainly be glad to dig those up. We have gone into those. I would be glad to dig those up and provide them for the record, if you like?

Senator **DOMENICI**. I think we can accomplish that. I thought maybe you had some recollection. I do not have them in the exact form, but my recollection is that, while it would not have solved the problem, that we have underfunded the administration's request for safety money for the Department of Energy, 2 out of the last 3 years, or the 3 out of the last 4 years. And a rather substantial amount in 1 year; as high as $75 million to $80 million.

In fact, I put the amendment in to add it back, and the House took it out in conference.

Senator **GLENN**. I think it was our view that it was underfunded—the request that came from the administration was not adequate by what we thought should be in there to begin with, and then we did not even provide that, as I recall.

Senator **DOMENICI**. I think that is correct.

Senator **GLENN**. And I cannot put the figures to it right now, but I would be glad to get those and send them over.

Senator **DOMENICI**. Thank you, Senator.

Senator **GLENN**. Thank you much.

The **CHAIRMAN**. Thank you, Senator Glenn.

Before we hear from our next witness, Brock Adams. If you are not in a hurry, Senator Metzenbaum has an opening statement.

STATEMENT OF HON. HOWARD M. METZENBAUM, U.S. SENATOR FROM OHIO

Mr. **METZENBAUM**. Thank you very much, Mr. Chairman.

I am very pleased this morning to have Senators Glenn and Adams, and Secretary Watkins appear before this committee.

The clean up, modernization and management reform of the nuclear weapons complex, is probably the most vexing challenge facing the Department of Energy.

It is a truism to state that the effective cleanup and reform of the weapons plants will, without a doubt, take many years and many billions of dollars.

But it is equally true that many years and many billions of dollars do not guarantee an effective cleanup. It will require much, much more to do the job: political will, strong management and expertise, and most of all it will take a commitment to environmental safety and health at all levels, from the DOE's most senior officials, to the subcontractors' most junior employees.

When Secretary Watkins came before the committee for his confirmation hearings, he spoke eloquently about the need to reorient the department's culture. I have been pleased to see the steps he has made in that direction. I think he is an able leader. And some of those steps have been the five-year plan, the 10-point initiative, the establishment of the tiger teams and review of how the department pays its contractors.

These are all positive steps. They represent a beginning of this enormous and long overdue job. They reaffirm my confidence in the Secretary's ability to undertake this responsibility.

But I want to state in the strongest terms that I do not believe that they are all of the response that we need.

There are four nuclear weapons facilities in the state of Ohio, and frankly, we need more than reassuring words and well-intentioned plans.

I want the public to be confident that they are not at risk living near these facilities. It has just been negotiated, a $73 million settlement, the claims of those living near the Fernald Plant.

But I want the workers at these plants to enjoy all the available safeguards to their safety and health. And I want the plants run by managers and employees who are well skilled in environmental safety and health measures.

I think I speak for other members of the Senate and for the American public when I say that I want real results in cleaning up these plants and correcting the total failure of operation and management.

And I am also very concerned about several recent developments that I will the ask the Secretary about.

When the tiger team investigated Fernald, there was no one from the Occupational Safety and Health Administration on the team.

And I am left uneasy that the nominees for certain key environmental positions have been individuals whose appropriateness for the job is not clear and will require very careful scrutiny by the Senate.

And most important is the Department of Energy Inspector General's recent report on the DOE management and operating contractors.

The Inspector General made many startling discoveries; his most shocking conclusion was that the Department's fundamental policy is, with few exceptions, to completely indemnify the management and operations contractors, including paying fines, liabilities, claims, damages and losses.

In other words, the Department indemnifies the contractors, and they do not have to give a damn. This lack of financial risk by the contractors is particularly troubling to me after having worked with the chairman of this committee last year, to institute a system of penalties for the Department of Energy contractors, to begin to provide them with an incentive to work more conscientiously.

And now we learn that still, and again and again, it is the taxpayers and not the contractors who are picking up the tab for penalties. This situation must be corrected immediately. We have had confrontation; we have had negotiations on this committee; we have worked out a legislative move in that direction, but we are not getting the Department of Energy to do that which they should be doing.

The reform and cleanup of the weapons complex may be too immense a job for one department.

The legislation before us today proposes important changes in departmental organization, and gives formal monitoring study and cleanup roles to other agencies.

Senator Glenn has done more than any other public official in the country to investigate the problems at the weapons complex and document to the Nation the gravity of the problem. His expertise in this area is well known and well respected by all of us. And his bill, S. 1304, is well thought out and will greatly improve environmental safety and health.

I hope the committee will give serious and speedy consideration to his legislation, of which I am an original co-sponsor.

And I am also glad to have the opportunity today to learn more about Senator Wirth's legislation, S. 972, which also strikes me as very worthy of our consideration.

Senators Glenn and Wirth, as well as myself and several other members of this committee, have nuclear weapons plants in our states. We know what a mess they are; we await their rapid cleanup.

Senator Wirth has also been a leader in this effort, and his legislation certainly deserves our consideration.

I think these are very good and very important bills.

Mr. Chairman, I thank you for holding these timely hearings. I appreciate your giving me an opportunity to give some of my views, and an opening statement.

[The prepared statement of Senator Metzenbaum follows:]

Statement of Senator Howard M. Metzenbaum

Energy and Natural Resources Committee Hearing
On the Department of Energy's Operation and Management
of its Atomic Energy Defense Activities
and the Environmental Cleanup of these Facilities

October 5, 1989

I am very pleased this morning to have Secretary Watkins, Senator Glenn and Senator Adams before the Committee. The clean up, modernization, and management reform of the nuclear weapons complex is the most vexing challenge facing the Department of Energy.

It is a truism to state that the effective clean up and reform of the weapons plants will without a doubt take many years and many billions of dollars. But it is equally true that many years and many billions of dollars do not guarantee an effective clean up. It will require much, much more to do the job: political will, strong management, expertise. And, most of all, it will take a commitment to environmental safety and health at all levels, from D.O.E.'s most senior officials to the subcontractors' most junior employees.

When Secretary Watkins came before this Committee for his confirmation hearings he spoke eloquently about the need to re-orient the Department's "culture." I have been pleased to see the steps he has made in that direction, such as the 5-Year Plan, the 10-point initiative, the establishment of the Tiger Teams, and the review of how the Department pays its contractors.

These are all positive steps. They represent a beginning of this enormous and long overdue job. They reaffirm my confidence in Secretary Watkins' ability to undertake this responsibility. But I want to state in the strongest terms that I do not believe they are an adequate response. There are four nuclear weapons facilities in the State of Ohio. I want more than reassuring words and well-intentioned plans.

I want the public to be confident that they are not at risk living near these facilities. I want the workers at these plants to enjoy all the available safeguards to their safety and health. I want these plants run by managers and employees who are well skilled in environmental safety and health measures.

I speak for other members of the Senate and for the American public when I say that I want real results in cleaning up these plants and correcting their total failure of operation and management.

I am also very concerned about several recent developments, which I will ask Secretary Watkins about. When the Tiger Team investigated Fernald there was no one from the Occupational Safety and Health Administration on the team. And I am left uneasy that nominees for certain key environmental positions have been individuals whose appropriateness for the job is not clear and will require very careful scrutiny by the Senate.

But most important is the Department of Energy Inspector General's recent report on the D.O.E. Management and Operating contractors. The I.G. made many startling discoveries. His most shocking conclusion was that "the Department's fundamental policy is, with few exceptions, to completely indemnify its management & operations contractors," including paying "fines, penalties, liabilities, claims, losses, and damages."

This lack of financial risk by the contractors is particularly troubling to me after having worked with the Chairman of this Committee last year to institute a system of penalties for D.O.E. contractors to begin to provide them with an incentive to work more conscientiously. And now we learn that it is the taxpayers and not the contractors who are picking up the tab for penalties. This situation must be corrected immediately.

The reform and clean up of the weapons complex may be too immense a job for one Department. The legislation before us today proposes important changes in Departmental organization and gives formal monitoring, study, and clean up roles to other agencies.

Senator Glenn has done more than any other public official in the country to investigate the problems at the weapons complex and document to the nation the gravity of the problem. His expertise in this area is well known to all of us and his bill, S. 1304, is well thought out and will greatly improve environmental safety and health. I hope the Committee will give speedy and serious consideration to his legislation, of which I am an original cosponsor.

I am glad to have the opportunity today to learn more about Senator Wirth's legislation, S. 972, which also strikes me as very worthy of our consideration. Senators Glenn and Wirth, as well as myself and several other members of this Committee, have nuclear weapons plants in our states. We know what a mess they are. We await their rapid clean up. Mr. Chairman, I think these are very good and very important bills.

I thank the Chairman for holding these timely hearings. I look forward to hearing from Secretary Watkins.

The **Chairman**. Thank you, Senator Metzenbaum.

Senator Wirth also has an opening statement.

STATEMENT OF HON. TIMOTHY E. WIRTH, U.S. SENATOR FROM COLORADO

Senator **Wirth**. Thank you. I will include my statement, if I might, in full, in the record, Mr. Chairman?

The **Chairman**. Without objection.

Senator **Wirth**. The basic problem that we have, Mr. Chairman, is one of trust. We have a nuclear weapons plant, as you know, in suburban Denver. 75 FBI agents have raided the plant. People living nearby simply no longer believe what the Department of Energy tells them.

The basic concern of the citizens is what the impact of that plant has been on the health of the people who live in the area, and the workers who are employed there? At this time, we simply do not know.

The Department of Energy has been remiss, over a long period of time, to conduct the long-range epidemiological studies. The work they have done is not known by or available to the public. The whole epidemiological study operation is carried out by about a dozen individuals.

Health professionals tell us that a significantly larger commitment of resources, including staff, is necessary to accurately gather and analyze the data.

People just do not believe the department anymore. When the department says everything's okay at Rocky Flats and there is no adverse health impact; the people in Colorado just do not believe them.

The legislation which I have offered this year, as in the past, would transfer the responsibility for epidemiological research out of DOE and put it in the Department of Health and Human Services, where other research occurs.

Why not have the fox do what a fox does and have the chickens elsewhere?

We have got to separate the two out. The two missions of the Department of Energy are mutually exclusive; to meet deadlines in weapons production and to protect the health of their workers. History suggests that both things cannot be done by the Department.

I am as appreciative as anybody of the good work done by Secretary Watkins. But even with his good stewardship, it is impossible to ask the department to carry this dual responsibility.

So I hope, Mr. Chairman, that we can move forward expeditiously and separate these two functions. The time has come to break into this terrible cycle. Maybe more importantly, the time has come to restore the trust of the people who live in the communities near our nuclear weapons facilities and the people who work at these plants.

I thank you very much, Mr. Chairman, and I am so pleased that the committee has moved as aggressively as it has to look at these issues.

Thank you, sir.

[The prepared statement of Senator Wirth follows:]

STATEMENT OF SENATOR TIM WIRTH
REORGANIZATION OF DOE RADIATION RESEARCH PROGRAM
OCTOBER 5, 1989

I would first like to welcome you, Secretary Watkins, and thank you for your efforts to elevate health and safety priorities within DOE. I have been deeply concerned about the effects of DOE nuclear weapons facilities on the health of workers and nearby residents since I came to Congress in 1974. At that time, I represented District 2 in Colorado -- home of the Rocky Flats Nuclear Weapons Facility -- and since then, my apprehensions about the safety of those in the area have mounted and continue to grow.

This year, as I have done in several prior Congresses, I have introduced the Radiation Research Reorganization Act, which would transfer the authority to conduct epidemiological studies of the effects of radiation from the Department of Energy to the Department of Health and Human Services.

The basic reason for this legislation is a very simple one: trust. How can the citizens of Colorado trust the Department of Energy when 75 FBI agents raid Rocky Flats? Why should they trust DOE when the State of Colorado is investigating serious violations of environmental and safety regulations at the Rocky Flats facility? Coloradans, understandably, have serious concerns about the federal allegations including illegal, unpermitted waste storage, disposal and incineration, false certification of compliance with state envionrmental law, improper employee training in handling hazardous wastes and unsafe working environments. I believe it is unfair to ask these citizens to live in an environment filled with uncertainty about their own well-being.

The inherent conflict of interest DOE has in living up to its mandate of producing nuclear materials and protecting its workers'health and the environment becomes apparent in another area. DOE has received dozens of statistically significant reports of cancer incidents, but has yet to use this information in any program to protect its workers. This cannot be construed as a confidence-building measure.

The testimony given before the House Panel on Procurement and Military Nuclear Systems by DOE Under Secretary John Tuck asserted that DOE would pay more attention to worker health studies than would any other agency. With all due respect, I would suggest that the track record suggests otherwise: DOE to date has under-administered its radiation research program. DOE employs only two people to administer this entire program. Discussions with independent experts indicate that at least a dozen trained experts are needed to properly evaluate the work of the contracted studies and adequately focus the radiation research program in order to determine, with some certainty, whether these plant operations are endangering workers and residents.

Secretary Watkins, more than once, has acknowledged why the public has lost its confidence in DOE. For years, the underlying operating philosophy and culture of DOE was that adequate production of defense nuclear materials and a healthy, safe environment were not compatible objectives. None of us can deny that the American public has lost confidence in the Department of Energy's ability to protect the health and environment of its workers and the people living near DOE nuclear facilities. I believe that Secretary Watkin's commitment, in conjunction with sound policy developed in Congress, can turn this tide.

Steps taken by Secretary Watkins so far are admirable and take us in the right direction. But without further real reform, his call to action rings hollow. The fact is, practices are not changing as quickly as the rhetoric and words cannot protect the health of the Denver residents or the Rocky Flats workers. As much as we all welcomed the appointment of Secretary Watkins to DOE, and as much as I am convinced of his sincerity and desire to clean up nuclear energy facilities such as Rocky Flats, I also worry about the time when Secretary Watkins moves on: who will take his place and how can I be assured that the good intentions Secretary Watkins leaves behind will be as deeply felt by the new secretary.

That is why the time has come to make these changes by statute, so that we can restore the public's confidence that the good will and policies endorsed and pursued by Secretary Watkins will continue uninterrupted. The legislation I have introduced transfers all the funds, personnel, responsibilities and data that DOE now dedicates to this work to HHS. While my bill would broaden the mandate of the organizations under HHS and the Public Health Service, they would be receiving additional funding to cover their expenses.

In addition to transferring authority, transferring funding and creating an advisory panel, my bill would:

- Ensure that HHS has adequate access to all relevant DOE records and data;
- Ensure that HHS has access to or is able to develop reliable data on radiation releases and exposure levels;
- Direct HHS to coordinate research with appropriate state agencies responsible for public health;
- Require that HHS conduct a comprehensive review of existing information and studies related to the effects of radiation exposure on health, including studies conducted by DOE, federal and state agencies and independent researchers;
- Ensure that steps are taken to ensure the confidentiality of information pertaining to individuals who are the subjects of the records; and
- Ensure that appropriate security clearances are obtained by researchers using classified materials.

Trust is hard to earn, and easy to lose. DOE has lost the public trust, and it will take much difficult work and concrete action to earn it back. I strongly believe that the only way to restore public confidence in radiation health research is to transfer authority to conduct epidemiological studies to an agency whose primary mission is health, HHS. HHS, with the Agency for Toxic Substances and Disease Registry, the Centers for Disease Control, the National Institutes of Health and the Food and Drug Administration under its umbrella, is the logical home for health research of all kinds. These various entities have all studied, from their particular perspectives, the health effects of radiation. HHS has a well-established program of cancer study as well as independence from the overshadowing mandate of nuclear weapons production.

We have all heard the old adage -- acknowledging the problem is half the battle. I commend Secretary Watkins for acknowledging the problems DOE has with its radiation research. I commend Secretary Watkins for trying to institute some changes in DOE's research program. But in order to make long-term changes -- ones that will increase public trust in DOE -- I believe the Secretary should take the next step. He should support a statutory transfer of radiation research responsibilities to HHS so that effective research can be continued long after the Secretary's tenure. We owe nothing less to DOE's workers and neighboring communities.

The CHAIRMAN. Thank you, Senator Wirth.

And now finally, Brock Adams, we are delighted to have you and know of your concern in this area and know the concern of your state and look forward to hearing from you.

STATEMENT OF HON. BROCK ADAMS, U.S. SENATOR FROM WASHINGTON

Senator ADAMS. Thank you very much, Mr. Chairman and the members of the committee, for the opportunity to testify this morning.

I am here to testify on these two very important pieces of legislation. And, Mr. Chairman, you are absolutely correct, the people of my State have a deep interest in what is done, not only on these two pieces of legislation, but on all matters involved with the nation's defense nuclear facilities.

The facilities at Hanford are some of the largest in the world. Hanford, WA, has the largest waste dump in the entire known free world. It may be the largest in the entire world. And we are deeply concerned.

Therefore, I am here this morning, Mr. Chairman, to testify for my people and for the people who live in this vicinity, as well as the other people in the United States, concerning the Department of Energy's programs, and, in particular, S. 972, Senator Wirth's bill, to transfer from the Department of Energy the radiation health research function to the Department of Health and Human Services, and to testify in support of S. 1304, Senator Glenn's bill, to make several important changes in the way that health and safety regulation is conducted within DOE.

And I want to commend you, Mr. Chairman, commend both Senator Wirth, a member of this committee, and Senator Glenn, for their longstanding leadership in this area.

And, Mr. Chairman, I am pleased to be an original co-sponsor of both of these bills.

I do so because of our experience in the State of Washington at DOE's Hanford reservation, which indicate that fundamental changes are needed in the way that health and safety is handled at these facilities.

I have visited these facilities many times, Mr. Chairman. In fact, dating back as far as 1961, when the N reactor was being built. It is time to recognize and to admit, and I think we have to admit this, that DOE's autonomous self-regulatory system has failed, and failed in what can only be described as a catastrophic manner.

In the environmental area it is now apparent that the lack of independent regulation has resulted in tens of billions of dollars of cleanup costs; practices, Mr. Chairman, such as the dumping of contaminated liquids directly into the soil, which began to be restricted in the private sector in 1976, under the Resource Conservation Recovery Act. They continue at Hanford today.

In areas of health and safety, which are the subject of the bills before the committee, the consequences of self-regulation are less well known, especially in the area of radiation exposure.

I suggest they are less well known precisely because the sort of independent review of outside regulators and access to information that has resulted from the enforcement of environmental laws, has not occurred for the health and safety in the areas of occupational health.

Nuclear safety, occupational and radiation health research, we are still dealing with a largely self-regulating agency. What light has been shed on health and safety problems at DOE has come largely from outside reviews by the National Academy of Sciences or independent panels, such as the Roddis Commission, convened to examine the N reactor after the Chernobyl accident.

To those that are not familiar with it, Mr. Chairman, the N reactor has the same basic structure as Chernobyl. It does not have a protective dome and it has a graphite core.

While DOE should get some credit for initiating some of these reviews—and I do want to give credit to this, this is not a DOE bashing exercise, this is an attempt to try to correct a tragic situation—temporary investigation panels do not substitute for outside regulation, especially when we are dealing with an industrial complex the size of that run by DOE.

I would also say that if there ever was a national security rationale for pervasive self-regulation and the restriction of environmental and health information that presently characterizes the DOE, the validity of that rationale has long since lapsed.

The fact that the entire DOE complex is plagued by operational safety and environmental problems of epic proportions should be evidence enough that these practices are counterproductive.

Mr. Chairman, in the case of the public's exposure to the department's predecessor agency's previously secret releases of enormous amounts of radiation, the department itself is figuratively and literally on trial. In these cases the so-called downwinder situations, the continued involvement of the department in the investigation and determination of health risks is part of the problem, not part of the solution.

It is also obvious that the lack of any independent and credible source of health and safety review of DOE will continue to plague the department's ability to proceed with day-to-day operations and with its modernization.

Whether we are talking about resolving the transuranic waste shell game, which is being played out in the west, or the continued operation of outdated facilities, the inability of the public and their elected officials to have any independent and credible source of information, let alone any regulatory control, is a fundamental source of DOE's problems.

Many members of the public and their representatives just end up saying "no" to DOE, and the rest of us are hard put to find the evidence we need to say yes.

As I said earlier, our experience with Hanford argues strongly for the regulatory changes proposed in these two bills. And I compliment their sponsors and I am pleased to co-sponsor.

I will highlight just two examples.

We often forget that the workers at DOE facilities face industrial, health and safety problems other than radiation. In 1987 I received an anonymous complaint from a worker at Hanford concerning asbestos exposure. I initiated a GAO investigation that indicated that DOE failed to follow OSHA procedures, contrary to its

OSHA equivalent policy. DOE has an OSHA equivalent policy, it just does not follow it.

DOE even failed to follow its own procedures for granting exemptions to its own safety requirements.

The second case, Mr. Chairman, we faced is a situation where DOE has released massive amounts of radiation from Hanford during the 1940's and 1950's. We have a prevailing westerly wind there and this involves both the States of Oregon and Idaho.

They did this without ever disclosing this fact and without ever following up with the health studies of the population living in the vicinity.

Once the information was released DOE insisted on conducting its own analysis of the health consequences. This was totally unacceptable to those citizens who believe that they had experienced health problems resulting from those releases.

Consequently, I found it necessary to turn to the Department of Health and Human Services to obtain independent risk analysis. This study was authorized last year and I am pleased to say, Mr. Chairman, that actual health screening activities will begin shortly—something that I do not believe would have ever taken place if we had left the responsibility solely with DOE.

Mr. Chairman, the secrecy at DOE must end. And the system of self-regulation must end. While I believe that Secretary Watkins is making a concerted effort to bring the department into the 1980's, the good intentions of one cabinet officer are not enough to substitute for the actions of this committee and this Congress, which we need to take to structurally reform the DOE.

I commend the chairman and all the members of the committee for scheduling this hearing on these very important bills. And I urge their speedy consideration, Mr. Chairman, and adoption by the committee.

I thank you again for the opportunity to testify. This is a terribly important subject to our people, and I commend the chairman and the committee for scheduling the hearings and moving forward with these bills.

Thank you, Mr. Chairman.

[The prepared statement of Senator Adams follows:]

STATEMENT OF SEN. ADAMS
BEFORE
THE SENATE ENERGY COMMITTEE
ON
LEGISLATION CONCERNING THE DEPARTMENT OF ENERGY
(S. 972 AND S. 1304)
October 5, 1989

Thank you, Mr. Chairman and members of the Committee for the opportunity to testify before you this morning on two very important pieces of legislation concerning the Department of Energy:

-- S. 972, Senator Wirth's bill to transfer the Department of Energy's radiation health research function to the Department of Health And Human Services, and

-- S. 1304, Senator Glenn's bill to make several important changes in the way health and safety regulation is conducted within DOE.

I want to commend both Senator Wirth, a member of this Committee, and Senator Glenn for their longstanding leadership in this area.

Mr. Chairman, I am pleased to be a co-sponsor of both of these bills. I do so, because our experience in Washington state at the DOE's Hanford Reservation indicate that fundamental changes are needed in the way in which health and safety is handled at such facilities. It is time to recognize and admit that the DOE's autonomous self-regulatory system has failed and failed in what can only be described as a catastrophic manner.

In the environmental area, it is now apparent that the lack of independent regulation has resulted in tens of billions of dollars in clean-up costs. Practices, such as the dumping of contaminated liquids directly to the soil, which began to be restricted in the private sector in 1976 under the Resource Conservation and Recovery Act, continue at Hanford today.

In the areas of health and safety, which are the subject of the bills before the Committee, the consequences of self-regulation are less well known especially in the area of radiation exposures. I suggest that they are less well known precisely because the sort of independent review of outside regulators and access to information that has resulted from the enforcement of environmental laws has not occurred for health and safety.

In the areas of occupational health, nuclear safety, and radiation health research, we are still dealing with a largely self-regulating agency. What light has been shed on health and safety problems at DOE has come largely from outside reviews by the National Academy of Sciences or independent panels such as the Roddis Commission convened to examine the N-Reactor after the Chernobyl accident. While DOE should get some credit for initiating some of these reviews, temporary investigation panels do not substitute for outside regulation especially when we are dealing with an industrial complex the size of that run by DOE.

I would also say that if there ever was a national security rationale for the pervasive self-regulation and restriction of environmental and health information that characterizes the DOE, the validity of that rationale has long since lapsed. The fact that the entire DOE complex is plagued by operational, safety and environmental problems of epic proportions should be evidence enough that these practices are counter-productive.

In the case of the public's exposure to the Department's predecessor agencies' previously secret releases of enormous amounts of radiation, the Department itself is figuratively and literally on trial. In these so-called "downwinder" situations, the continued involvement of the Department in the investigation and determination of health risks is part of the problem; not part of the solution. It is also obvious that the lack of any independent and credible source of health and safety review of DOE will continue to plague the Department's ability to proceed with day-to-day operations and its modernization.

Whether we are talking about resolving the transuranic waste shell-game being played-out in the West or the continued operation of outdated facilities, the inability of the public and their elected officials to have any independent and credible source of information, let alone regulatory control, is a fundamental source of the Department's problems. Many members of the public and their representatives end up "just saying no" to DOE and the rest of us are hard put to find the evidence we need to say "yes."

As I said earlier, our experience with Hanford argues strongly for the regulatory changes proposed in these two bills and I will highlight just two examples. We often forget that workers at DOE facilities face industrial health and safety problems other than radiation. In 1987, I received an anonymous complaint from a worker at Hanford concerning asbestos exposure. I initiated a GAO investigation that indicated that DOE failed to follow OSHA procedures contrary to its OSHA-equivalent policy. DOE even failed to follow its own procedures for granting exemptions to its safety requirements.

In the second case, we faced a situation where DOE had released massive amounts of radiation from Hanford during the 1940's and 1950's without ever disclosing this fact and without ever following up with health studies of the population living in the vicinity. Once the information was released, DOE insisted on conducting its own analysis of the health consequences. This was totally unacceptable to those citizens who believe they have experienced health problems resulting from those releases. Consequently, I found it necesssary to turn to the Department of Health and Human Services to obtain an independent risk analysis. This study was authorized last year and I am pleased to say that actual health screening activities will begin shortly; something that I do not believe would ever take place had we left this responsibility solely with DOE.

Mr. Chairman, the secrecy at DOE must end and the system of self-regulation must end. While I believe that Secretary Watkins is making a concerted effort to bring the Department into the 1980's, the good intentions of one cabinet secretary are not a substitute for the actions that this Committee and this Congress need to take to structurally reform the DOE.

I commend the Committee for scheduling this hearing on these important bills and I urge their speedy consideration and adoption by the Committee.

Thank you again for the opportunity to testify.

The CHAIRMAN. Thank you very much. One question on epidemiological study.

I think we have had too much secrecy in the past, but would you agree with me that simply to open these to the public would be less appropriate, particularly considering the bulk of the records. I believe these records include private medical records of individuals. Would it not be better to have those released by some responsible body to responsible research organizations who would have to justify the kind of research they would do? I am concerned that people with just take them and write some news story based on Joe Schmoe who used to live next to a plant and now has cancer.

Senator ADAMS. I think so, Mr. Chairman. The suggestions that I have made with the Center of Disease Control in Atlanta and the HHS, other departments that do this, we are not attempting to create some kind of scare in the area. I think it must be carefully done.

My point is, it needs to be done by experts who do this who are outside of the Department, and I run a big Department, Mr. Chairman, and I find it is very hard to get a big Federal Department to investigate itself, or a big agency.

I once had a Coast Guard cutter that ran into the side of a quarter-mile-long oil tanker and came up to me with a report that the oil tanker was at fault, and we hit it amidships. Well, that sort of was an example to me that it is very hard to a Department to investigate itself, and that is what we are saying here, and I agree with you.

I am not saying you just scatter the records, but there are very, very good Federal agencies and that is what Senator Wirth's bill does and Senator Glenn's bill does, is give to the agencies that do this and have them do it in a proper fashion.

The CHAIRMAN. Well said. Senator Domenici?

Senator DOMENICI. I have no comments.

The CHAIRMAN. Senator Wirth?

Senator WIRTH. I want to commend Senator Adams, who has been dauntless and tireless and we really appreciate your constant attention to these difficult issues. Thank you very much for being here.

The CHAIRMAN. Thank you very much, Senator Adams, we appreciate your testimony.

Senator ADAMS. Thank you, Mr. Chairman, and thank you, members of the Committee for your patience.

The CHAIRMAN. We are glad to have the man of the hour, Admiral Watkins, accompanied by a very outstanding Under Secretary from a very great state, Henson Moore. We are very glad to have you, Admiral Watkins. Leo Duffy is also with the Admiral, and we are glad to have you, Leo.

STATEMENT OF HON. JAMES D. WATKINS, SECRETARY, DEPARTMENT OF ENERGY, ACCOMPANIED BY W. HENSON MOORE, DEPUTY SECRETARY; AND LEO P. DUFFY, SPECIAL ASSISTANT TO THE SECRETARY FOR COORDINATION, DEPARTMENT OF ENERGY WASTE MANAGEMENT

Secretary **Watkins**. Thank you, Mr. Chairman. It is a pleasure to appear before the Committee again today.

A little over 7 months ago, on the 22nd of February, I first appeared before this Committee as President Bush's nominee for Secretary of Energy.

At that time, we all agreed that the problems faced by the Department of Energy were very serious in nature. Of those, Mr. Chairman, you stated your belief that the most important one was the management, which you described as a shambles.

You went on to say the job I would face as Secretary of Energy was "the most daunting management task I think I have ever given anybody I have seen in Government since I have been around here," and I can now say unequivocally, Mr. Chairman, truer words were never spoken.

Poor management has been the root cause of most of the problems I have found. As a result, good management is and will continue to be the solution. In the 7 months that I have been on the job, my number one management goal has been to change significantly the culture which encompasses operations at all DOE facilities, but particularly our weapons plants.

For too long, the underlying management and operating philosophy within the Department of Energy was that adequate production of defense nuclear materials and a healthy, safe environment were incompatible objectives.

To underscore this perception, the concept of full line management responsibility and personal accountability for environment, safety, and health goals at DOE plants was lacking. It is my belief that DOE set effective goals in the past only for production. With respect to safety and the environment, however, while contractors must accept a portion of the blame, the Department of Energy and its predecessors' past failure to set goals and standards, to demand excellence and accountability from itself and its contractors, and to manage problems as they arose, is at the heart of the problems we are currently facing.

Although the job of fundamentally changing the management and operating philosophy is not accomplished easily or rapidly, I can report today that we are beginning to make headway.

In an effort to instill personal accountability and responsibility quickly, effectively and completely, and to debunk the myth that our nuclear weapons plants cannot be run in an environmentally-safe manner, I have been publicly and privately tough on both the Department and its contractors.

I have established a 10-point plan to turn around the Department's management culture. I have sent out "tiger teams" to assess the management problems in the field, and I have published a Five Year Plan that attempts to address how we should begin fixing the environmental problems at our facilities.

I have rejected the schedules set previously for DOE programs and repeatedly pushed DOE staff and contractor employees to set new levels of excellence in professional performance.

We are aggressively making changes. However, I still believe what I said to you in February: it will take a full two years to completely turn around this agency, provided I receive the continued support of this committee.

If I can make one point to the members of this committee today, it would be my strong and sincere belief that with continued progress in changing the management and operating culture, the system can be made to work. My 7 months have been directed at keeping DOE facilities up and running, as long as they do not pose a threat to safety, health, and the environment.

Some of my critics think the solution to DOE's problems is to shut everything down, turn off the lights, and go home. It is my adamant view, however, that we have not come to a fork in the road where our choice is either unilateral nuclear disarmament, or full production under dangerous conditions that threaten the environment, safety, and health of our people.

My message today then is that, while the present system may be in a state of disrepair, it can be fixed. With the continued full cooperation and help of this committee and with a forward-looking, systematic, orderly approach, the Department of Energy can run its defense plants in an environmentally-sound and safe manner and produce the materials needed for the Nation's defense.

Let me turn now to some of the specific issues currently confronting the Department. In order to appreciate the nature of these, it is important to understand how the Department's unique way of doing business at its production plants came about.

The Department conducts most of its national defense-related activities using a contracting system that has its antecedents rooted in the sense of urgency and national commitment of World War II.

In particular, the relationship between the Department and its contractors who manage and operate our Government-owned, contractor-operated—so-called GOCO—facilities was created by the Atomic Energy Commission, building on its predecessor, the Manhattan Engineering District, to use the skills available in the Nation's most preeminent private firms and universities to design, construct, and operate our nuclear defense production facilities or provide basic research.

This relationship provided the broadest degree of contractor indemnification in recognition of the fact that operating risks were regarded as unique and largely unknowable.

The management system that arose was characterized by the Government reserving the right to control the task of weapons production, the Government relying on the contractors' corporate expertise, the Government accepting all the financial risks of the enterprise, and the contractors, in turn, accepting little or no profit.

This GOCO relationship was intended to be long-term. The AEC felt it was important to ensure that the Government could maintain high-quality expertise through continuity in the operation of its major facilities.

The alternative to this flexible system would have been to create a massive, new and self-reliant Federal establishment. The exigencies of World War II and the immediately following cold war years did not permit this time-consuming and perhaps even ill-advised alternative process.

The AEC management system also was characterized by the fact that the government, despite its initial high level of expertise, maintained somewhat of a hands-off approach to contractor operations.

Because the AEC was buying for the Government the same management expertise that had raised these contractors to preeminence in their field, AEC employees did not stress oversight of a contractor, nor provide needed and clear guidance in such areas as environmental protection.

This attitude extended to procurement, also carried out by these contractors.

There are currently 52 management and operating contracts in the DOE GOCO system. Thirty of these 52 contracts contain the award fee concept. When I came to DOE, none of these contracts required that a significant portion of the award fee be based on performance related to environment, safety, and health.

As of October 31, 1989, all of the award fee performance plans relating to defense production facilities will contain evaluation criteria providing that at least 51 percent of the award fee be based on performance in these vital areas.

In addition, if the contractor fails to perform satisfactorily in one of these or other important areas, it may receive no fee for that period.

These actions during my 7-month tenure represent the most sweeping change in emphasis in the history of the M&O contracting concept at DOE.

In addition to these changes, we have significantly increased DOE headquarters involvement in all phases of the award fee process. Specifically, the appropriate program Assistant Secretary will be involved in establishing award fee goals and objectives and will participate in all performance evaluations.

Assistant Secretary involvement will assure heightened scrutiny of contractor compliance with health, safety, and environmental requirements.

We are also standardizing a number of our award fee practices by requiring that performance evaluations be made every 6 months and mandating that senior field management be included in all stages of the award fee process.

Finally, consistent with our concept of full line management responsibility and accountability, we are making contractor self-evaluations an important part of the overall award fee program.

The accuracy, candor, and realism of contractor self-evaluations will then be measured against independent reviews by Department oversight experts.

While we consider these are all worthy efforts to conform the M&O contracting system with our new management philosophy, we fully recognize that we are presently walking a fine line with our contractors. The vast majority of our contractors are making very little of their total corporate profit from operation of DOE plants.

The DOE award fee as a percentage of total corporate profit is generally relatively small, about 0.3 percent to 4 percent of after-tax profit.

At the upper end of the spectrum is a company called EG&G, whose percentage of corporate profit derived from DOE business was between 10 and 20 percent for 1988. But as a more typical example, however, for two of our largest contractors, Westinghouse Corporation and Martin Marietta Corporation, who have multiple M&O contracts, the contribution to profits from their DOE contracts is 2.7 percent and 4 percent, respectively, for 1988.

In the past, the national security implications of the work at the production plants have been the driving force in the continued relationship between the contractors and DOE.

With the current heightened sensitivity to environmental problems, however, the contractors are increasingly worried about criminal and civil liability for continued facility operations. Accordingly, while we want to aggressively demand greater management accountability and fiscal responsibility from our contractors, we also have to realize that there are not many countervailing incentives to keep the M&O contractors from walking away altogether.

As corporations ultimately responsible to their shareholders, they will continue to compare the rewards they receive to the risks they perceive for operating our plants.

The point is not that changes cannot be made, nor that our contractors are resistant to accountability; in fact, the contractors want to do a good job and we at DOE want to see them succeed.

We must realize, then, that the solution to the environmental problems at DOE plants is not to place all the responsibility or blame on our contractors or to craft solutions that place them in an impossible situation. Instead, the Department of Energy must get its own act together, provide the goals and leadership, demand the excellence and accountability, and then I can guarantee that the results will follow and the major contractors will stay in the game.

Another of the most serious management issues I am facing at the Department of Energy today is the lack of qualified and trained personnel in the area of environment, safety, and health—the very people I need to make the system work.

There does not currently exist within the Department of Energy, or the U.S. Government for that matter, a professional career development program that teaches, trains, and develops personnel for the highly important and increasingly complicated task of managing environment, safety, and health and production issues at our defense plants.

As a result, DOE is forced to continue to rely heavily upon its contractors for this expertise. Furthermore, in a world in which you get what you pay for, a way must be found to make salaries for key government personnel reasonably competitive with those available outside Federal service.

It is essential to accomplishing the long-range cultural change in management philosophy that DOE attract, train, and retain at least a fair number of the brightest personnel possible for this important work. I have tasked the Under Secretary to design such a plan and report back to me in the very near future.

I appreciate what was done by the Senate in the recent DOD bill, by giving us at least a foot in the door and some hope that we might get some relief in the near time frame, so that I can get these reactors and these facilities back on the environmental track within the next year.

We cannot wait much longer for support over here on the Hill in both the dual compensation and the special provisions for added pay for at least a discrete number of skills.

Another challenge before us is how to ensure that the Department's M&O contracts reflect this new management philosophy so that weapons production can be accomplished in an environmentally—responsible manner.

Some contractors are seeking greater assurances of immunity from risk; others, including the Department's Inspector General, argue that a greater assumption of financial risk by the contractors is the best way to enhance environment, safety, and health. Still others, including some members of Congress, have suggested that a substantial increase in the award fee is the best way to promote and maintain safety.

These conflicting views about the appropriate level of assumption of risk, indemnification, and award fees has led us to reevaluate our M&O contract requirements. As a part of this reevaluation, the Department will issue, before the end of this year, a Notice of Proposed Rulemaking, with an opportunity for public comments, to determine what changes are necessary and desirable in our M&O contracts.

In addition to ensuring that these contracts satisfy our present management priorities, this will have the salutary effect of providing consistency of contractual requirements throughout all our facilities.

Another DOE initiative relates to the new Price-Anderson Act amendment that authorizes the Department to impose civil penalties on contractors for violations of rules, regulations, or orders relating to nuclear safety.

Last month, we published in the Federal Register a Notice of Inquiry, requesting public comments on DOE enforcement program objectives and plans. After considering the public comments, the Department plans to publish, this winter, a Notice of Proposed Rulemaking on procedural rules for imposing penalties, referring suspected criminal violations to the Department of Justice, and granting automatic remission of civil penalties to non-profit educational institutions.

Although much still needs to be done, I expect that the Department will publish its final rule by the summer of 1990.

In order to implement the new penalty authorities of Price-Anderson and to operate within the broader context of ensuring a clear and sustained focus on nuclear safety, I am establishing within the Department the Office of Nuclear Safety. This will be an independent oversight organization, reporting directly to me, that will review and concur in departmental nuclear safety policies and advise me as to whether program management is adequately ensuring nuclear safety.

This office will have broad responsibilities to assess contractor and field office activities. I regard this office as an essential management tool.

I look to it to have the independence, confidence and skills necessary to levy—in a quick, accurate and equitable manner—fines that will withstand close judicial scrutiny.

Under Price-Anderson, contractor fines will not be allowable costs.

The director of that office has already been selected and is on board.

On another front, the Department will be releasing tomorrow its criticality safety assessment of the operations at the Rocky Flats plant. The criticality assessment team found no evidence that there had ever been a criticality instance at Rocky Flats.

However, the team recommended improvements in a number of existing safety practices. I am directing that the Acting Assistant Secretary for Defense Programs review the report's findings and recommendations and prepare, expeditiously, an action plan that responds fully to the report.

There is a heightened sense of cooperation within the various Federal agencies as we set out on these new initiatives. We are now working together to address a delicate issue that frequently confronts DOE activities. I believe that the argument made in a recent lawsuit by one of our contractors that different Federal agencies are sending contradictory messages to our M&O contractors is inaccurate.

On the contrary, it is clear that government agencies, the private sector, and corporations engaged in government contracts must all comply with environmental requirements established by law. Our contracts impose that duty upon DOE contractors.

As you can well imagine, the current grand jury investigation into potential criminal violations of environmental laws at Rocky Flats has caused considerable anxiety among our contractors, as well as our own employees.

The leadership at DOE has sought a responsible position between ignoring or trivializing the very real concerns of DOE employees about individual criminal prosecutions, or, as was recommended by some, asking the President to invoke a national security exemption from these environmental laws for DOE facilities.

Neither of these options is satisfactory to me. In an effort to calm the fears of DOE staff and establish a policy which could be understood, the Department of Justice recently issued a letter to the EPA Administrator and to me, which walks that fine line, by setting forth the general practice of the Justice Department.

The letter states in part, "Prompt good faith efforts by Rockwell and DOE to disclose environmental violations and reach environmental compliance agreements with the State of Colorado and the United States Environmental Protection Agency would be a significant factor in any decision whether to prosecute Rockwell, its employees, and DOE employees with respect to future violations of environmental laws that occur by reason of continued operation of the plant."

I believe the Department of Justice letter sets forth a road map of fairness which will provide our employees and contractors with every incentive to disclose environmental violations, reach agreements to take steps to achieve environmental compliance, and assure that those actions are, in fact, undertaken.

I have some good news for you today, and that is our Five-Year Plan. As I promised you earlier this year, the plan has been formulated, and was published for comment on August 31, 1989. This plan provides a framework within which the Department will conduct its waste management and clean-up activities. It is designed to address all environmental restoration and waste management requirements, whether statutory, regulatory, or by agreement.

For the first time, the Department is planning in a unified fashion and in the open with broad participation by interested parties outside the Federal Government. Also, for the first time, clean-up planning is taking place without deference to other program interests. The activities under the Five-Year Plan will be treated as a single, focused, and unified program with a new budget and reporting structure so that the Congress will be able to better oversee the progress we make in this area.

Unlike so much of what has gone on before, the Five-Year Plan will be a living document, one in which our plans and priorities will be revisited each year with full public participation.

We already have received a wide variety of comments on the Five-Year Plan from individuals, corporations, and States, but one consistent comment is that the Department simply lacks the management structure necessary to carry out the ambitious undertakings of the Five-Year Plan.

So given the importance and the reach of this plan, I will establish an Assistant Secretary for Environmental Restoration and Waste Management to oversee waste operations as well as manage the Five-Year Plan. I believe the establishment of this office will greatly help the DOE reach the objectives that I have outlined today.

The road before us is filled with complex problems for which simple solutions do not exist. The problems have resulted from a 40-year culture cloaked in secrecy and imbued with a dedication to the production of nuclear weapons without a real sensitivity for protecting our environment.

We are now in a different era, one in which concern for the environment is coupled directly to meeting our national security objectives. It is obvious to me—and I hope to you—that the Department cannot solve all of these problems alone. As I said before, I need your assistance and counsel as we all seek to resolve these problems and to maintain the Nation's future nuclear capability in a manner that does not do violence to the environment or compromise public health and safety.

Thank you, Mr. Chairman, for allowing me to come before you today, and I will stand by to answer any questions.

[The prepared statement of Secretary Watkins follows:]

REVISED OCTOBER 5, 1989

STATEMENT OF

JAMES D. WATKINS, ADMIRAL, U.S. NAVY (RETIRED)

SECRETARY OF ENERGY

BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES

UNITED STATES SENATE

OCTOBER 5, 1989

REVISED: October 5, 1989

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

It is a pleasure to appear before this Committee today. A little over seven months ago -- on February 22, 1989 -- I first appeared before this Committee as President Bush's nominee to be Secretary of Energy. At that time, we all agreed that the problems faced by the Department of Energy were very serious in nature. Of these, Mr. Chairman, you stated your belief that the most important one was management, which you described as "a shambles." You went on to say that the job I would face as Secretary of Energy was "the most daunting management task I think we have ever given anybody I've seen in government since I've been around here." I can now say unequivocally, Mr. Chairman, truer words were never spoken. Poor management has been the root cause of most of the problems I have found. As a result, good management is, and will continue to be, the solution.

In the seven months that I have been on the job, my number one management goal has been to change significantly the culture which encompasses operations at all DOE facilities, but particularly our weapons plants. For too long, the underlying management and operating philosophy within DOE was that adequate production of defense nuclear materials and a healthy, safe environment were incompatible objectives. To underscore this perception, the concept of full line management responsibility and personal accountability for environment, safety and health goals at DOE plants was lacking. It is my belief that DOE set effective goals in the past only for production. With respect to safety and the environment, however, while contractors must accept a portion of the blame, the DOE and its predecessors' past failure to set goals and standards, to demand excellence and accountability from itself and its contractors, and to manage problems as they arose is at the heart of the problems we are currently facing.

Although the job of fundamentally changing the management and operating philosophy is not accomplished easily or rapidly, I can report today that we are beginning to make headway. In an effort to instill personal accountability and responsibility quickly, effectively, and completely, and to debunk the myth that our nuclear weapons plants cannot be run in an environmentally safe manner, I have been publicly and privately tough on both the Department and its contractors. I have established a ten-point plan to turn the Department's management culture around. I have sent out "Tiger Teams" to assess the management problems in the field and I have published a 5-year plan that attempts to address how we should begin fixing the environmental problems at our facilities. I have rejected the schedules set previously for DOE programs and repeatedly pushed DOE staff and contractor employees to new levels of excellence in professional performance. We are aggressively making changes. However, I still believe what I said to you in February: it will take a full two years to completely turn this agency around provided I receive the continued support of this Committee.

If I can make one point to the members of this Committee today it would be my strong and sincere belief that, with continued progress in changing the management and operating culture, the system can be made to work. My seven months have been directed at keeping DOE facilities up and running, as long as they do not pose a threat to safety, health and the environment. Some of my critics think the solution to DOE's problems is to shut everything down, turn off the lights and go home. It is my adamant view, however, that we have not come to a fork in the road where our choice is either (1) unilateral nuclear disarmament or (2) full production under dangerous conditions that threaten the environment, safety and health. My message today, then, is that while the present system may be in a state of disrepair, it can be fixed. With the continued full cooperation and help of this Committee, and with a forward-looking, systematic, orderly approach, the Department of Energy can run its defense plants in an environmentally sound and safe manner and produce the materials needed for the Nation's defense.

Let me turn now to some of the specific issues currently confronting the Department. In order to appreciate the nature of these, it is important to understand how the Department's unique way of doing business at its production plants came about.

The Department conducts most of its national defense-related activities using a contracting system that has its antecedents rooted in the sense of urgency and national commitment of World War II. In particular, the relationship between the Department and its contractors, who manage and operate our Government-owned-contractor-operated (GOCO) facilities, was created by the Atomic Energy Commission (AEC) (building on its predecessor, the Manhattan

Engineer District) to use the skills available in the Nation's most preeminent private firms and universities to design, construct, and operate our nuclear defense production facilities or provide basic research. This relationship provided the broadest degree of contractor indemnification in recognition of the fact that operating risks were regarded as unique and largely unknowable.

The management system that arose was characterized by: the Government reserving the right to control the task of weapons production; the Government relying on the contractors' corporate expertise; the Government accepting all the financial risks of the enterprise; and the contractor, in turn, accepting little or no profit. This GOCO relationship was intended to be long-term; the AEC felt it was important to ensure that the Government could maintain high-quality expertise through continuity in the operation of its major facilities. The alternative to this flexible system would have been to create a massive, new, and self-reliant Federal establishment. The exigencies of World War II and the immediately following Cold War years did not permit this time-consuming, and perhaps ill-advised, alternative process.

The AEC management system also was characterized by the fact that the Government, despite its initial high level of expertise, maintained somewhat of a "hands-off" approach to contractor operations. Because the AEC was buying for the Government the same management expertise that had raised these contractors to preeminence in their fields, AEC employees did not stress oversight of the contractors nor provide needed and clear guidance in such areas as environmental protection. This attitude extended to procurement also carried out by these contractors.

There are currently 52 management and operating contracts in the DOE GOCO system. 30 of these 52 contracts contain the award-fee concept. When I came to DOE, *none* of these contracts required that a significant portion of the award fee be based on performance related to environment, safety and health. As of October 31, 1989, however, *all* of the award-fee plans relating to defense production facilities will contain evaluation criteria providing that at least 51% of the award fee be based on performance in these vital areas. In addition, if the contractor fails to perform satisfactorily in one of these important areas, it may receive no fee for that period. These actions during my seven month tenure represent the most sweeping change in emphasis in the history of the M&O contracting concept at DOE.

In addition to these changes, we have significantly increased DOE headquarters involvement in all phases of the award-fee process. Specifically, the appropriate program Assistant Secretary will be involved in establishing award-fee plan goals and objectives, and will participate in all performance evaluations. Assistant Secretary involvement will assure heightened scrutiny of contractor compliance with health, safety and environment requirements. We are also standardizing a number of our award-fee practices by requiring performance evaluations to be made every six months and mandating that senior field management be included in all stages of the award-fee process. Finally, consistent with our concept of full line management responsibility and accountability, we are making contractor self-evaluations an important part of the overall award-fee program. The accuracy, candor and realism of contractor self-evaluations will then be measured against independent reviews by Department oversight experts.

While we consider these are all worthy efforts to conform the M&O contracting system with our new management philosophy, we fully recognize that we are presently walking a fine line with our contractors. The vast majority of our contractors are making very little of their total corporate profit from operation of DOE plants. The DOE award fee as a percentage of total corporate profit is, generally, relatively small -- 0.3% to 4% of after-tax profit. At the upper end of the spectrum is EG&G, whose percentage of corporate profit derived from DOE business was between 10% and 20% for 1988. As more typical examples, however, for two of our largest contractors, Westinghouse Corporation and Martin Marietta Corporation, who have multiple M&O contracts, the contribution to profits from their DOE contracts is 2.7% and 4%, respectively, for 1988.

In the past, the national security implications of the work at the production plants had been the driving force in the continued relationship between the contractors and DOE. With the current heightened sensitivity to environmental problems, however, the contractors are increasingly worried about criminal and civil liability for continued facility operations. Accordingly, while we want to aggressively demand greater management accountability and fiscal responsibility from our contractors, we also have to realize that there are not many countervailing incentives to keep the M&O contractors from walking away altogether. As corporations ultimately responsible to their shareholders, they will continue to compare the rewards they receive to the risks they perceive for operating our plants. The point is not that changes cannot be made nor that our contractors are resistant to accountability. The contractors want to do a good job, and we at DOE want to see them succeed. We must realize, then, that the solution to the environmental problems at DOE plants is not to place all of the responsibility or blame on our contractors or to craft solutions that place them in an impossible situation. Instead, the DOE must get its own shop in order, provide the goals and leadership, demand excellence and accountability, and then results will follow.

Another of the most serious management issues I am facing at the Department of Energy today is the lack of qualified and trained personnel in the area of environment, safety and health -- the very people I need to make the system work. There does not currently exist within DOE, or the U.S. Government for that matter, a professional career development program that teaches, trains, and develops personnel for the highly important and increasingly complicated task of managing environment, safety, health, and production issues at our defense plants. As a result, DOE is forced to continue to rely heavily upon its contractors for this expertise. Furthermore, in a world in which "you get what you pay for," a way must be found to make salaries for key Government personnel reasonably competitive with those available outside Federal service. It is essential to accomplishing the long-range cultural change in management philosophy that DOE attract, train, and retain a fair number of the brightest personnel possible for this important work. I have tasked my Under Secretary to design such a plan and report back to me in the very near future.

Another challenge before us is how to ensure that the Department's M&O contracts reflect this new management philosophy so that weapons production can be accomplished in an environmentally responsible manner. Some contractors are seeking greater assurances of immunity from risk. Others, including the Department's Inspector General, argue that a greater assumption of financial risk by the contractors is the best means to enhance environment, safety and health. Still others, including some Members of Congress, have suggested that a substantial increase in the award fee is the best way to promote and maintain safety. These conflicting views about the appropriate level of assumption of risk, indemnification and award fees has led us to reevaluate our M&O contract requirements. As a part of this reevaluation, the Department will issue, before the end of the year, a Notice of Proposed Rulemaking, with an opportunity for public comments, to determine what changes are necessary and desirable in our M&O contracts. In addition to ensuring that these contracts satisfy our present management priorities, this will have the salutary effect of providing consistency of contractual requirements throughout all our facilities.

Another DOE initiative relates to the new Price-Anderson Act amendment that authorizes the Department to impose civil penalties on contractors for violations of "rules, regulations, or orders" relating to nuclear safety. Last month we published in the Federal Register a Notice of Inquiry requesting public comments on DOE enforcement program objectives and plans. After considering the public comments, the Department plans to publish this winter a Notice of Proposed Rulemaking on procedural rules for imposing penalties, referring suspected criminal violations to the Department of Justice, and granting automatic remission of civil penalties to nonprofit educational institutions. Although much still needs to be done, I expect that the Department will publish its final rule by the summer of 1990.

In order to implement the new penalty authorities of Price-Anderson, and to operate within the broader context of ensuring a clear and sustained focus on nuclear safety, I am establishing within the Department the Office of Nuclear Safety. This will be an independent oversight organization, reporting directly to me, that will review and concur in Departmental nuclear safety policies and advise me as to whether program management is adequately ensuring nuclear safety. This office will have broad responsibilities to assess contractor and field office activities. I regard this office as an essential management tool. I look to it to have the independence, confidence, and skills necessary to levy, in a quick, accurate and equitable manner, fines that will withstand close judicial scrutiny. The Director of that office has already been selected and is on board.

On another front, the Department will be releasing tomorrow its criticality safety assessment of the operations at the Rocky Flats Plant. The criticality assessment team found no evidence that there had ever been a criticality incident at Rocky Flats. However, the team recommended improvements in a number of existing safety practices. I am directing that the Acting Assistant Secretary for Defense Programs review the report's findings and recommendations and prepare expeditiously an action plan that responds fully to the report.

There is a heightened sense of cooperation within the various Federal agencies as we set out on these new initiatives. We are now working together to address the delicate issues that frequently confront DOE activities. I believe that the argument made in a recent lawsuit by one of our contractors that different Federal agencies are sending contradictory messages to our M&O contractors is inaccurate. On the contrary, it is clear that Government agencies, the private sector and corporations engaged in Government contracts must all comply with environmental requirements established by law. Our contracts impose that duty upon DOE contractors.

As you can well imagine, the current grand jury investigation into potential criminal violations of environmental laws at Rocky Flats has caused considerable anxiety among our contractors as well as our own employees. The leadership at DOE has sought a responsible position between ignoring or trivializing the very real concerns of DOE employees about individual criminal prosecutions or, as was recommended by some, asking the President to invoke a national security exemption from these environmental laws for DOE facilities. Neither of these options is satisfactory to me. In an effort to calm the fears of DOE staff and establish a policy which could be understood, the Department of Justice recently issued a letter to the EPA Administrator and me, which walks that fine line by setting forth the general practice of the Justice Department. That letter states, in part:

> Prompt, good-faith efforts by Rockwell and DOE to disclose environmental violations and reach environmental compliance agreements with the State of Colorado and the United States Environmental Protection Agency would be a significant factor in any decision whether to prosecute Rockwell, its employees, and DOE employees with respect to future violations of environmental laws that occur by reason of continued operation of the plant.

I believe that the Department of Justice letter sets forth a road map of fairness which will provide our employees and contractors with every incentive to disclose environmental violations, reach agreements to take steps to achieve environmental compliance, and assure that those actions are, in fact, undertaken.

I have good news for you today and that is our 5-year plan. As I promised you earlier this year, the plan has been formulated and was published for comment on August 31, 1989. This plan provides the framework within which the Department will conduct its waste management and cleanup activities. It is designed to address all environmental restoration and waste management requirements, whether statutory, regulatory, or by agreement. For the first time, the Department is planning in a unified fashion and in the open, with broad participation of interested parties outside the Federal Government. Also for the first time, cleanup planning is taking place without deference to other program interests. The activities under the 5-year plan will be treated as a single, focused, and unified program with a new budget and reporting structure so that Congress will be able to better oversee the progress we make in this area. Unlike so much of what has gone before, the 5-year plan will be a living document, one in which our plans and priorities will be revisited each year with full public participation.

We already have received a wide variety of comments on the 5-year plan from individuals, corporations and States. One consistent comment is that the Department simply lacks the management structure necessary to carry out the ambitious undertakings of the 5-year plan. Given the importance and reach of this plan, I will establish an Assistant Secretary for Waste Management and Environmental Restoration to oversee waste operations as well as manage the 5-year plan. I believe the establishment of this office will greatly help the DOE reach the objectives that I have outlined today.

The road before us is filled with complex problems for which simple solutions do not exist. The problems have resulted from a 40-year culture cloaked in secrecy and imbued with a dedication to the production of nuclear weapons without a real sensitivity for protecting the environment. We are now in a different era, one in which a concern for environment is coupled directly to meeting other national security objectives. It is obvious to me, and I hope to you, that the Department can not solve all of these problems alone. As I said before, I need your assistance and counsel as we all seek to resolve these problems and to maintain this Nation's future nuclear deterrent capability in a manner that does not do violence to the environment or compromise public health and safety.

U.S. Department of Justice
Land and Natural Resources Division

Office of the Assistant Attorney General

Washington, D.C. 20530

September 14, 1989

Admiral James D. Watkins
Secretary of Energy
Department of Energy
1000 Independence Avenue, S.W.
Washington, D.C. 20585

Honorable William K. Reilly
Administrator
Environmental Protection Agency
401 M. Street, S.W.
Washington, D.C. 20460

Dear Admiral Watkins and Administrator Reilly:

I know that identification and correction of existing environmental violations at Department of Energy (DOE) facilities is a matter of top priority for both of your organizations. One factor that could complicate this process is potential criminal prosecutions of environmental violations that occur as a result of continued facility operations after non-compliance with environmental requirements has been disclosed and compliance initiatives are undertaken but not yet completed.

We wish to encourage the voluntary self-disclosure and correction of environmental problems. Nevertheless, government agencies, the private sector, and corporations engaged in government contracts alike must comply with environmental requirements established by law. Violations of environmental laws at DOE facilities will be evaluated by the Justice Department on an equal footing with other violations of environmental laws. This means that knowing violations of law may result in prosecution. In the exercise of our case-by-case discretion whether to prosecute, we normally take into account a variety of factors. These include whether a party is engaged in good faith efforts to come into compliance with regulatory requirements once violations from ongoing activities are discovered by the party and disclosed to the government.

We understand that Rockwell International Corporation (Rockwell), the contractor at DOE's Rocky Flats Plant, and DOE are in the process of developing agreements with relevant government authorities to establish a plan and schedule for achieving the plant's compliance with environmental requirements. We also understand that Rockwell and DOE are concerned about exposure to prosecution for actions undertaken in good faith in continuing to operate the Rocky Flats Plant while such agreements are negotiated and while actions are being taken to achieve compliance pursuant to those agreements.

In accordance with our general practices, summarized above, regarding the exercise of our discretion to prosecute, I can state the following on behalf of the Department of Justice and the United States Attorney for the District of Colorado:

Prompt, good-faith efforts by Rockwell and DOE to disclose environmental violations and reach environmental compliance agreements with the State of Colorado and the United States Environmental Protection Agency would be a significant factor in any decision whether to prosecute Rockwell, its employees, and DOE employees with respect to future violations of environmental laws that occur by reason of continued operation of the plant.

In addition, if (i) agreements are made between Rockwell and DOE and Colorado state authorities and EPA providing for corrective steps to achieve environmental compliance at Rocky Flats in accordance with a specific plan and schedule, (ii) the extent of violations of law at Rocky Flats has been fully disclosed to the relevant regulatory or other legal authorities, and (iii) corrective action is being undertaken in strict accordance with the terms of such agreements, our general practice would be not to prosecute DOE employees or Rockwell or its employees for conduct undertaken in accord with and authorized by such agreements. It would also be our general practice not to use these compliance agreements, or future conduct undertaken in operating the plant in accord with and as authorized by these compliance agreements, as evidence in a grand jury proceeding or in our case-in-chief in a criminal prosecution against Rockwell, its employees, or DOE employees. However, evidence (such as physical evidence) other than compliance agreements or conduct pursuant to them, obtained as a result of continuing operations, could be used in prosecution of prior environmental violations. In addition, our general practice would not preclude prosecution of crimes such as false statements, perjury or obstruction of justice committed during this period. It would also not preclude the use of any evidence, whether conduct or otherwise, obtained as a result of operations during this period in prosecutions of such crimes.

Sincerely,

Richard B Stewart

Richard B. Stewart
Assistant Attorney General
Land & Natural Resources Division

The CHAIRMAN. Thank you very much, Admiral Watkins, for an excellent statement.

There may be some departments and agencies of the Federal Government that run themselves. To be in that position is an accolade and honor for past good works and a joy to be in. Yours is not such a department. Of all the departments in the Federal Government, none is in a greater turmoil, faces greater difficulty, calls for a greater challenge than the Department of Energy. We have discussed that from the time you first testified here, and I think even you did not realize the extent of your challenge.

As far as I am concerned, you are doing an excellent job, but you have very great difficulties. Part of your difficulty is that you have this enormous job to do calling for the best people in the country, and you can only pay them less than half of what their jobs would pay if they were in the private sector. Consequently, you cannot get the kind of help you need.

We did put a provision in the Defense Authorization Bill, and I do not know whether that will go anywhere in conference. I hope it will. You are caught in the problem, frankly, of Congressional pay. The Congress wants to be forced to raise its own pay and consequently will not raise anybody else's even when it needs to be done.

I think we should decouple that. I think we should give you the kind of expertise you need. I am not terribly hopeful that that can be done across the government, but at least we ought to do it for the Department of Energy and face up to that fact.

I have two or three observations before I ask you the first question. The first is to agree with you that the nuclear weapons complex cannot be shut down, certainly not in its entirety. There may be some debate about that, but we all know that we are not going to shut it down.

Second, I would say that simply increasing penalties cannot clean up the mess and cannot make the plants safe. I do not want us to get into the kind of situation we did with Superfund a few years ago where with banners flying and horns blazing we passed this great Superfund bill, gave it billions of dollars, and then looked at it 2 or 3 years later and found out there had been no clean-up. There had simply been fresh studies but no clean-up because the contractors could not get insurance. The clean-up contractors were made to hue such a close line in terms of their own responsibility that they could not be insured; consequently, there was no clean-up.

I do not want us to create a set of rules so stringent that you cannot get any contractors to run the plants and do the clean-up. That is, indeed, a real problem now which, of course, leads to the first question.

In Rocky Flats, for example, you have contractors who say that the continued operation of the facility would put its employees at risk for civil and criminal prosecution for environmental violations even if the company is acting in good faith, doing its best to address and resolve the problems.

How do we resolve that conflict between violation of rules and getting the problem dealt with and the mess cleaned up?

Secretary WATKINS. I touched on that in my statement, Mr. Chairman, but let me augment my previous words.

I think the work that we did with Justice and EPA at my level—at the Attorney General level and at Bill Reilly's level—was precedent setting for the Nation. Actually, in many ways, it was the horse that should have been before the cart. We had already signed agreements with the State of Washington and the State of Colorado. Negotiations for other agreements are under way across the Nation. We have some 49 agreements in place. We have 14 more significant State agreements that we are working on right now and everyone is involved.

The Department of Justice's position as reflected in the letter is very important. It says that there is an element of fairness even among lawyers. It says that, in fact, we can be reasonable. You have admitted it. You have been brought into this job to clean up a mess where, in 27 of our activities, we know we are not in compliance with the law. That is wrong.

To put me in jail at this point in time because I was lucky enough to be called into this assignment does not seem to be the appropriate fix. It seems to me that the way to fix this is to enter into a new compliance agreement which then becomes the basis for compliance. So if we are in compliance with an agreement where the State and the EPA Region are involved, it seems to me that that is a reasonable position to take. The letter from Justice establishes a fairness doctrine for future violations.

We have been open and honest about these things. We want our people to have personal integrity and honesty in exposing problems. We should address the problems in agreements, get on with the fixes, and supply the necessary resources to do the job.

That is essentially what we have done at Rocky Flats in the agreement in principle between myself and the Governor of Colorado, the recent position taken by Bill Reilly and myself on compliance agreements, and the Justice letter which essentially gives us some underpinnings for the Five-Year Plan and all State agreements.

We believe that this is sufficient to allow the contractors to continue. In fact, the chairman of the board of EG&G and I chatted on this subject. I said, "Are you familiar with these documents?" He said "Yes, I am." I said, "Are you willing to accept this contract under those provisions?" He said, "Yes, I am." I believe that they are fair documents and we can live with them.

I think that this is very important because it sets the tone for the entire contracting process within DOE. We believe we now have the tools we need to make this thing work.

So, I would say those are precedent-setting decisions that were only recently made because of the actions under way at Rocky Flats.

The CHAIRMAN. Indeed, do you need or should you have any kind of congressional endorsement of this action of the Department of Justice——

Secretary WATKINS. Yes. I think it is important for Justice to have legislators that they agree that this is a fair practice, and I think we should work with you and Justice and EPA to codify what we are doing. I think that is a worthwhile project. I really do.

I think it is a process that you all agree with up here. This will discourage any perceptions that industry may have that they do not even want to get in the game for 2 percent of the profit.

The CHAIRMAN. It seems to me absolutely necessary to have something that achieves the result, but I feel a little bit uncomfortable about having the Justice Department saying where we are going to selectively enforce the laws, even though it is a good cause. I think we probably should endorse that.

What is your opinion on the provision in Senator Glenn's bill—that is S. 1304—that requires the department to enter into compliance agreements with State governments and the EPA for facilities that are not in compliance with the environmental laws. Is it workable?

Secretary WATKINS. That provision of the Glenn bill we essentially agree with and are already doing. We are moving toward it. We just talked about one aspect of it, which is to put into a law recognition by the Congress that there is a valid process that we are now following and it gives us the strength that we need to convince our contractors that this is not just a fly-by-night decision in one case but, in fact, can be used for others as well.

It does not preclude prosecution. It merely says that it will be weighed heavily.

If you have exposed these things and you have got them in the plan and you are working the problem, there is no deceit.

In other words, nobody is condoning criminal violations. What we are saying is that we are trying to make an aggressive effort to have openness and honesty here to get these things on the table and deal with them, and I think we do need help.

So, that particular portion of the Glenn bill is something that basically we are already doing, save the one item of codification by the Congress which I think will be necessary.

The CHAIRMAN. How do we set up a process that encourages disclosure of environmental problems at these facilities?

Secretary WATKINS. I think we do it by the same technique. After all, I am putting into effect contracting practices that, one, will put this information right in the contract and, two, will establish an award process which is applicable to all our contractors. They will understand that—I will put people with critical skills—if I get a little extra dough for the handful of them—out there in our facilities to oversee them on a day-by-day around-the-clock basis I will know what those contractors are doing to comply, and I will continue with my internal oversight, as well as external oversight, bodies to move in and sample the water periodically at these same facilities.

I think the incentives are there. I have not had any discussion with any of the chief executive officers of these companies who did not believe that what I am doing is the right thing to do for the environment. So, I do not believe there is going to be a problem, but we have to ensure that all of these good policies are carried out, and that is where we have been weak, as you know, in the past. We simply have not had any hydraulic lines connected to the DOE rudder out in the field. They have just been kind of adrift out there.

Now, with these practices, I think we have pulled it all together from contracting to properly wording something in the law that gives us the feeling that we can do all of these things in the context of this fairness doctrine I think we are now operating under.

The CHAIRMAN. We had a quite a debate in this committee and on the floor on renewal of the Price-Anderson Act and on what kind of requirements to put on the contractors. That is, what kind of sanctions should there be for wrongdoing?

We finally ended up with the provision which you say you are implementing and you are coming up with rules in the Department of Energy.

Would it be helpful or not helpful to make contractors further liable, for example, for gross negligence, or increase the amount of penalties? Or do you think we have got the right mix?

Secretary WATKINS. Well, I think we are heading for the right mix. The Department of Energy, in my opinion, has been slow in implementing Price-Anderson, but we are on the way now, and we should go through the rulemaking process.

I believe—like the process followed by the Nuclear Regulatory Commission on fines—that we should have embodied within the new Office of Nuclear Safety the same kinds of skills to bring the kind of penalties to bear on this that will withstand judicial scrutiny.

We are underway to do this. We are not there yet. I see no reason why we should not make it clear to the contractor that—just as in the private sector in the nuclear business, for example—we are going to expect them, in certain circumstances, to have to pick up the costs of this on their own and not be reimbursed by the Government for violation of the Price-Anderson Act.

So, I think this does need to be said. If you feel it is needed in law, that is fine. We plan to follow that procedure in the rulemaking we hope to get on the street in November. It will be in there, to the extent that you think it is necessary to make it very clear. I think it would be helpful.

The CHAIRMAN. Admiral, I have a host of other questions, but I want to try to adhere to a 10-minute rule. We also have a series of three votes starting at 10:30. So, let me turn it over to Senator Domenici to go as long as he will until the first vote, and then we will come back. I suppose it will take us 25 minutes or so to vote. So, if you will relax while we are gone.

Senator DOMENICI. Mr. Chairman, might I just ask with reference to your intention for the rest of the morning, I have an issue that is very important but off the subject. Will we have a second go-round if I return after everyone is finished?

The CHAIRMAN. Yes.

Senator DOMENICI. I do not want to take his time on the issue—although I think it is very serious—in front of all these Senators and everyone that is here on this issue. Thank you, Mr. Chairman.

Mr. Secretary, if I read you right, you have two new approaches internally to the structure of the department. The department—you are going to have an Office of Nuclear Safety, and you are going to create an assistant secretary for waste management and environmental restoration.

Now, Mr. Secretary, the real issue as I see it here has not changed from where it was before, except it is now taking on some flesh, and that is credibility.

We have now heard at least two Senators who preceded you in that chair, who propose to take certain functions that involve environmental safety away from the department and place them elsewhere, either in an independent posture or under another commission, or in the case of Senator Glenn's bill, to give the Environmental Protection Agency some rather new independent control over your efforts with reference to defense activities.

Do I take it that your two proposals, the department creation of an Office of Nuclear Waste and this new assistant secretary position, that those are your response to the two bills before us and efforts to take authority away from the department and vest it elsewhere in this activity?

Secretary **Watkins**. As you know, Senator Domenici, there are a number of bills up here. There is the Glenn bill, there is the Adams bill, there is the Wirth bill. I think all of these have considerable merit based on last year's data. In other words, if I were the Congress, I would have done the same thing.

We are running fast now. We are moving out, and we are beginning to run over and actually do more than any of those bills, and I ask at the very outset to give me a chance for one year to let me move things and eliminate some of these variables that you want to put into law.

I believe we ought to limit what we put into law to something that is useful, and I am not sure yet what is useful. Yet, I do believe that some of these things need to be codified.

So, what I would ask is that you watch what I am doing.

I am trying to keep the committee fully informed, not only this committee, but the committees in the House and the Armed Services committees, of what we are doing to move aggressively in these various areas. I look over the Glenn bill, for example, and in almost every area except for one which you referred to as expanding the outside oversight groups, we are doing every one of them and, in fact, doing more than is actually in the bill.

There are some things in the bill that I really do not have any objection to. But if you now expand external oversight, let us talk specifically.

We are talking about the Defense Nuclear Facilities Safety Board expansion. I happen to applaud the Defense Nuclear Facilities Safety Board concept, the way it came out last year in the Congress. It was a good bill. It is five independent commissioners that set up a 100-person staff. It gives them the capability of a "mini-NRC."

They report to me and to the Congress, and if I do not do what they say to do in 90 days, you are going to string me up. That is what the bill says. And that is OK by me because I happen to believe that this kind of an activity is critical to public credibility. So, I am all for it.

But while I am doing all these other things, if you now say that we are going to expand that to everything else we are doing, before confirmation of the five members, and before I can get the thing going, I think we are going to stumble all over ourselves.

I think we are moving too fast on last year's data and not giving me a chance to get a lot of these variables out of the way and then allowing me to come back and work with you and say, "OK, let us have an omnibus bill in a variety of areas to see if we cannot wrap up these things and codify them." I do think there is merit to much of the work that is in these bills today.

Now, for example, there is one on epidemiology. I happen to believe that we should not take away my accountability and responsibility for health, and we should not give the EPA my responsibility for the environment.

Let EPA be the external watchdog, but do not give them the responsibility. Give it to me. I know how to run it if I can get these skills on board and if you all agree with my organizational changes. That is the best of all worlds. Then let EPA have open access, come on in and hammer us if we do not comply with the law. I am all for it. But give me the accountability and responsibility in health, safety, and environmental areas.

Do not take it out of DOE. You will wreck the line management system. You will make it impossible for us to deal with our contractors in a tough way, and I do not think it is necessary. I do not think it is the right way to go.

Senator DOMENICI. Mr. Secretary, in creating the Office of Nuclear Safety, as I read your statement, they would be directly responsible to you, but could you take just a couple of minutes and further elaborate the real issue that is being raised.

I am not saying the Senator from New Mexico endorses this proposition, but the issue that is being made, a rather simple one that you cannot provide credible oversight over your own department in matters as complex and difficult as these.

Secretary WATKINS. I agree with that statement, Senator Domenici, but that is what you have done with the Defense Nuclear Facilities Safety Board. That is what it will do.

This is my internal mechanism so that when that oversight board comes in, I hope they will find minimal problems. I have got to have my own organization that will work the problem. I have to have somebody picking up the cigarette butts. I do not want a lot of people telling me there are cigarette butts on the deck. I have got to have somebody to pick them up. I am trying to do that kind of work internally.

There is not any such thing in the Department of Energy today. If you can imagine running experimental reactors, running research reactors, running production reactors without an Office of Nuclear Safety. I cannot stand that.

All good industries and businesses out there have these kinds of internal organizations, knowing that the NRC is going to come in and take a look. But they hope when they come in that they are not going to find a lot. So, I need both.

Senator DOMENICI. Mr. Secretary, you want to establish this new assistant secretaryship to oversee the five-year plan.

Do you have any real assurance that we could get that assistant secretary appointed before your five-year plan has expired?

Secretary WATKINS. If you will allow me to have nine instead of eight assistant secretaries, we may even have a candidate that I could recommend to the White House for their consideration in this very room today, with me.

Senator DOMENICI. Have they already cleared the 17 months of FBI checks?

Secretary WATKINS. As a matter of fact, we have already initiated the paperwork. When this happens, if it does happens, I can get support out of this committee so we can move expeditiously. If you will have the hearings and confirm him up here, we can do it in a month.

Senator DOMENICI. Mr. Secretary, my last question will be preceded by a statement.

I am pleased that you have put on the record—I think it is the first time I have heard it the years I have been here—the history of the evolution not only of the Department but of the apparatus that serves the Department.

You spoke of the award-oriented facilities. We have some very scientifically spectacular institutions that are run by the University of California, run by AT&T, with no profit.

I gather this is very difficult when it comes to assessing penalties and enforcing liability against the entity that is in the management position when they started out and perceived themselves to be there for no profit. There is no money around to pay penalties from.

Then we complain that we are paying the penalty to ourselves, because we pay the whole bill so we pay the penalty. That is a difficult one, is it not, for you?

Secretary WATKINS. Yes, sir, it is, and I mentioned just tangentially in my statement that we are going to be very concerned about the nonprofit organizations in our rulemaking process. You will see these in our November rulemaking proposal that will go out for comment. Hopefully we will be able to surround a variety of facility concepts.

Obviously, what I am talking about when I am talking about award fee, an award fee is not applicable to every one of our facilities. It happens to be applicable to about two-thirds of them.

Senator DOMENICI. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much. I think Senator Wirth came in next. Senator Wirth?

Senator WIRTH. Thank you very much, Mr. Chairman.

Secretary Watkins, I know what a big job it is to restore trust. Your being at DOE is a step in that direction, the good work of Hensen Moore, your shift of contractors to EG&G and Don Kerr I think are steps in the right direction. Don was in Colorado, met with a whole variety of people, and is starting out taking the right kinds of steps.

One serious, haunting problem remains—accurate health research about what Rocky Flats is doing to the citizens there. That is the thrust of the legislation that I have offered.

When 75 FBI agents came into Rocky Flats, people got scared to death. They said, "Hey, what is going on out there?"

When the Sierra Club brings suit and says that in a clandestine fashion waste is being burned in the middle of the night, illegally, people believe that, even though apparently there is evidence to the contrary now. People just do not know what to believe anymore.

So it is no surprise that a fundamental problem is that people do not believe the data DOE has given them related to their health. They do not believe that they are getting the straight skinny out of the Department of Energy about the impact of Rocky Flats on employees there, or people in the community.

Now, we have talked about this in the past. You know that I believe that we ought to shift health research away from DOE—give that respnsibility to the agency whose primary responsibility is to protect the health of our citizens. I think this would be good public policy, be good for the public health, and I think it would be good for the Department—but I know that we disagree on that.

You have appointed a panel called SPEERA, to evaluate the Department's epidemiological research activities you testified before Senator Glenn in early August that you would accept the recommendations that came from the SPEERA panel.

However, SPEERA panel's agenda includes considering "the utility and feasibility of transferring the epidemiological research function." So your panel is looking at the feasibility of making the very transfer that I have been recommending for many years.

Secretary WATKINS. I tried to be fair to your bill, Senator.

Senator WIRTH. I understand. But then on September 12, appearing before that panel, you said that any recommendation of transferring the program out of DOE was "totally unacceptable."

Now, tell us which statement is correct. On the one hand, you said you would comply with what SPEERA said they would do. You said that in testifying, I believe, before Senator Glenn in August. In September, in testifying before SPEERA, you said that any transfer was totally unacceptable.

Now, as I read those two, there may be some mutual exclusivity between those two statements and I wanted to give you the opportunity for the record to clarify any ambiguity that may have crept into my interpretation of what ought to be done.

Secretary WATKINS. I will go with the committee's recommendations. I find it personally the wrong thing to do. I think I overstated that. Clearly, I will agree with the group. I think it is a very competent group. It is a very unusual group. In fact, it has the senior health official in the State of Oregon on it, who I know personally from my work on the AIDS Commission. I think it is a very balanced group and I am ready to take their recommendation. So let us clarify that for the record.

Senator WIRTH. Second, you signed an agreement—DOE did—with the State of Colorado which included extensive health studies, again trying to go to the question of trust and confirming that the Government is concerned about what is happening.

But those health studies are, as you know, woefully underfunded. That is clear from just the studies on their surface. You so stated, Donna Fitzpatrick has testified that they are underfunded. So clearly we have a job to put funding in there.

The question that I am going to ask really goes again to the problem of the future leadership in the Department—your good efforts versus what may be said down the line. The Director of DOE's epidemiological research program, Dr. Robert Goldsmith, said that, with few exceptions, he did not know how or where he could spend greater resources for the program if they were made available.

Here you have, again, a problem of credibility. On the one hand you have the director of the program saying he does not know where he could spend any more money if he had it, and on the other hand, all of the outside experts, the Secretary and Assistant Secretary Fitzpatrick saying the epidemiologic program is woefully underfunded.

We have a problem in Colorado. We want these studies done. We would like a statement made from you indicating that, we have a big problem—epidemiologic studies are expensive and intensive. You know that the Hanford Study on thyroid was about $4 million over 3 years and that is a very small study.

The studies in Colorado are going to be expensive, difficult ones to undertake, but you have signed an agreement with Colorado saying we are going to do those studies. I would appreciate it if maybe you could give us a signal for the record, despite Dr. Goldsmith, that this is important and we are going to do it.

Secretary **Watkins**. Well, let me say this: he was not stating what is in our fiscal year 1991 budget submission to the Office of Management and Budget that will be here on the Hill. We are putting another $4.5 million in this area alone. That is a 25 percent increase from what the whole budget has been on epidemiology.

We are also building a whole new epidemiology organization. I only have one person over there. You can imagine how inadequate our attention has been on epidemiology. Having my experience on the AIDS Commission, I am very aware of the critical importance of the kind of dose reconstruction and work that has to be done.

It is expensive, it is going to take a long time and we have got to put more resources in it. I boosted it up by $4.5 million in fiscal year 1991, so I do not know what he is talking about.

Senator **Wirth**. You might ask him. I do not know what he is talking about either, but you might ask him.

Secretary **Watkins**. It is his budget. I am looking at his budget sheet right now: comprehensive epidemiologic data resources, instead of half a million, $5 million. That is just in that one line item.

Senator **Wirth**. You can understand our problem of credibility, when you had only one person operating a whole set of studies that have to be comprehensive in nature and are imperative for understanding, public trust that has got to increase and we do appreciate——

Secretary **Watkins**. You are aware of what we are doing in the State of Washington? We have a complete dose reconstruction study underway there. We have all the epidemiology from databases there being worked.

We have a very open system. We are allowing qualified researchers to come in, and I have the National Academy of Sciences in the game. We are going to move out aggressively in this area, so you have got my attention there.

Senator **Wirth**. You are moving so aggressively at Hanford that we are worried that resources may be sucked away from Rocky Flats to Washington, and I know that we would have your assurance that that is not going to happen.

Secretary **Watkins**. We would never rob Peter to pay Paul.

Senator **Wirth**. A final question if I might—we have to run for a vote: it relates to the waste storage issue, which is more than familiar to you.

As you realize, we are getting close to a time when the amount of waste that can be stored at Rocky Flats is at a maximum. We are bumping the top of that waste container and Rocky Flats is going to shut down unless something is done related to that waste.

Governor Andrus says he is not going to take it. WIPP is not ready and not even close to being ready. We might debate what year in the '90s is going to be ready, but it is going to be quite a long way.

Secretary **Watkins**. Governor Gardner has written me a letter and said, "Do not look my way for anything"—that is the State of Washington. So it is a problem.

Senator **Wirth**. You get a feeling, talking to some of the DOE people, that they think this game of chicken is somehow going to get played in such a way that it is going to stop, but it is not going to.

I mean, the Governor is not going to. We are not going to in the State of Colorado, so I would hope that you can get your people there to redouble their efforts.

For example, in focusing on the whole business of compacting waste. As you know, it seems to me those efforts there are going to have to be redoubled. We do not have any choice. We just do not have any choice, and somehow there does not seem to be that sense of urgency.

I know you have got a new contractor coming in and so on, and I know that Henson was recently out there looking at it. It is a terrible problem, but the thing is going to come to a stop. I think early next year is the deadline.

Secretary **Watkins**. We are going to work it out, Senator Wirth. Next week you are going to be briefed, along with the Governor, and other members of the congressional delegations that are appropriate to the WIPP opening, on just exactly where we stand, and we will address the whole issue of excess waste beyond the 1,601 cubic yards allowed by the State of Colorado this limitation will be exceeded if we cannot open on 1 March, which we cannot.

I do not expect to open WIPP until about the 1st of July. This means that we will generate about two and half boxcars with compacting. We are putting a "full-court-press" on getting that compactor in so that we can cut down by one-third the volume.

All of this is underway, so I would say it is the most intensive effort within DOE to get our new road map together, the one I promised some time ago when I said, I am going back to start all over again, I am not going to accept anybody else's schedule, because I was not getting good technical information on the WIPP opening.

Now I have gotten that, I am working with the Academy, I am working with a blue ribbon panel which includes State officials, and next week we will be briefing everybody on a draft plan that will address the issue of waste beyond that which exceeds the 1,601 cubic yards.

It is in there. We will have to address it. It is a tough issue, with everybody hardening their position not to accept anything. I think we are going to have to find some resolution of this if, in fact, what the chairman said earlier, that we are not going to unilaterally disarm, is the name of the game.

I have in my own mind how we do this, but I am not going to discuss it until after I get the WIPP plan briefing to you all so that we can begin to talk with people like yourself, the other Members of the important delegations here, and the Governors. We need to get together in a session and try to resolve this.

Senator WIRTH. I think there is another constituency out there. Regardless, the issue goes beyond, say, the notion of unilateral disarmament. If in fact we are going to get into some major arms control agreements that means a lot of weapons are going to be coming back from Europe and elsewhere.

The place where the reprocessing is done is largely Rocky Flats, as you know, so for a broad constituency it is imperative to get them to understand the importance of the plant and the plant is operating effectively.

I really appreciate your being here. I have got to go do the really important business of voting on this flag-burning amendment, so I will leave you.

Thank you very much.

[Recess.]

The CHAIRMAN. The committee will come back to order.

Admiral, we apologize. We had four rollcall votes on the floor.

I think Senator Wirth had finished and next in order of arrival will be Senator Metzenbaum, who I think had to go to another committee, and he will have questions in writing.

Senator McClure is next.

Senator McCLURE. Thank you very much.

Mr. Secretary, welcome back to the committee. I want to congratulate you on the statement you made this morning. I hope it goes a long ways towards meeting the criticism and demands of people who are very critical and very honestly, you recognized there is adequate grounds for criticism of what we have or have not done in the past.

I want to go back just one step in this process so that I can perhaps better understand what the problem is and the approach to the problem and perhaps contribute to the public dialogue in that way.

There has been much said about what was wrong at specific places. That has led many people to conclude that the structure is wrong and needs to be changed, and yet nothing has been said about whether or not the same problems have occurred at every installation.

Could you comment as to whether or not we have the same problems at every installation or is it a different kind of a picture than that?

Secretary WATKINS. I think we have a different problem at every installation and, in some cases, Senator McClure, even with the same major contractor, we will find that their performance at one facility is significantly better than that at another facility. So, I think it is different.

We will find in one facility, for example, we inadequately address radiological controls, significantly so, very inadequate, and yet excellence in so many other areas. So, they are all different.

I think that Rocky Flats, because of the nature of the issues there that to Justice Department and EPA actions, is indicative of probably one of the most difficult of all the facilities in terms of the process that is underway there. By the same token, it is probably one of the most serious across-the-board in all areas for mismanagement.

For example, we have just had a report from a security review of one of our facilities at INEL in Idaho. The independent reviewer—who we brought in specifically for his expertise in defense security—stated that it was clearly the best of all activities across the nation.

In fact, so much so that we planned and used them as an example in the area of physical security and so forth.

They generally, under the EG&G contract, have done an excellent job. So, in that particular case, perhaps because of association with the naval reactors program—the military program for years where we had the Rickover discipline instilled in the very earliest stages, it still seems to be better. The same with some of the experimental reactors out there. They seem to be operated in a more professional way.

So, this is one of the things that was attractive about bringing the EG&G group to bear on Rocky Flats because of their performance out at INEL.

Senator McClure. And they operate under identical or very similar contracts, but with very different results.

Secretary Watkins. Yes, sir.

Senator McClure. The reason I asked that question is, of course, my experience with these facilities was pretty largely—it has shaped my attitudes about it—it was pretty largely shaped by my experience in working with the people at INEL.

I watched what was happening at Savannah River. I think there were a great many people who could see problems developing in the Savannah River, and yet it did not seem to be getting through the system somehow to be recognized.

Secretary Watkins. That is correct, sir.

Senator McClure. And I think it is fair to say—not by 20/20 hindsight in my case—that I could see things were happening in Savannah River that were being covered up in Savannah River, things that were not covered up in Savannah River that were transmitted to headquarters that never got—attracted any attention at headquarters level. And I could never understand how that was happening under identical contracts under the same kind of structure for management.

I guess the reason I am groping with that question is changing the structure may or may not be a way to deal with what turns out to be personnel difference.

Secretary Watkins. I think, Senator, I would agree with you except that DOE has not had onsite the oversight function so necessary to monitor compliance with the contract.

Without that information we are subject to the leadership vagaries of the contractor and, as I say, a major contractor doing one work in one of four facilities may do an absolutely superb job and in the other three facilities may be falling down on the job because of local leadership, without oversight on the part of the DOE to say, "Look, you are not complying with the contract, you are not sensitive to these various issues." In absence of that, then, the contractor feels that they are doing a job adequately, and they continue on as before.

So, we really do have a very serious problem in the institutional process within DOE that, as you know, I am trying now to change. The "tiger team" assessments are giving us the recommendations we need in the various skill areas that are so critical. I am setting up the nuclear safety office. All of these things are new, have not been done before, and will allow us to encourage our contractors to succeed.

In other words, most of the senior people I have dealt with say, "Look, if you can find out something we are doing wrong, it is of benefit to us to know that early. We do not want to fail."

We have to carry our share of the burden, and we have not done that. It just happens that you have a man out there at Idaho or you had men over the years, that have been extremely competent managers. It has just happened that way.

I was out there. I know about the early days of the nuclear program, and I think it has a history of being run that way.

Senator McClure. I do not see the same problems occurring in Albuquerque at Sandia or Los Alamos, as an example. They seem to be very site-specific as to where the problems occur.

I do know one thing that perhaps helped at Idaho, and that is DOE has an Idaho office. There is an Idaho presence on site.

Secretary Watkins. And I think that is helpful because everywhere we have a major office, if that office is co-located with a facility, there is a tendency to have closer management oversight. But, recall that we had that kind of situation at Savannah River, and it did not work.

It is not just having the office there. You need the skills, the leadership technique, the oversight, the involvement of headquarters here in Washington that really understands, getting reports that make sense.

We look back at our reports coming in from Rocky Flats over all of these years, and it says everything is wonderful.

So, if you are not getting honest, factual, hard-hitting reports, how can you possibly sit here in Washington and and not think everything is working well?

We were totally uncoupled from the contractor, in my opinion. In some cases it did not make any difference because the contractor was doing a good job because of the local leadership they had there that wanted to do a good job anyway, and we had sufficient history behind us to say we have set up a track record of excellence over these years and we have been able to continue it.

But, absent that, I am afraid that we are going to find as the "tiger teams" come back—as they did at Fernald, as they have done at Rocky Flats—they will continue to find these problems. And yet, at West Valley our "tiger team" came back and said not only are they not doing a bad job, they are doing an excellent job in the area of nuclear safety.

Well, that is a plus, but we did not know that in headquarters until the "tiger team" came back and told us, and those "tiger teams" are manned with the skilled personnel that are necessary to assess the management process.

So, we are going to see a wide range of problems that these "tiger teams" will come back over the next 2 years and tell me about.

Senator **McClure**. I have a whole series of questions. I will submit most for the record in view of the time and the constraints on your time as well as that of the committee.

But I do have one other area which I think for me is extremely troublesome, and I know from our conversations is troublesome to you.

We finally last night in the Senate released some nominees, and they have been confirmed. You have been hamstrung by the Congress as well, not only in policy but in personnel, not only in pay, but in dollars. Congress shares some responsibility for the lack of oversight in the past. That is not just the fault of DOE.

But one of the areas that contributed to the delay on the confirmation of those appointments, and there is no secret about it, is the contest that goes on constantly between the State of Nevada and the Department of Energy. And I do not pick on Nevada except that that is where the problem seems to be most pointed.

In a front page article in the Washington Post dated October 3, the director of the Nevada Agency for Nuclear Projects said, and I quote, "The State of Nevada is determined to test the foundation of the constitutional arrangement of the relationship between the States and Federal Government on the environmental permits issue. We have not had any overtures from DOE, and I am certain that any would be rejected out of hand."

Well, considering the State's position, when does your department plan to start court action regarding the State law prohibiting waste storage in Nevada?

Secretary **Watkins**. When we get our own management plan solidified.

I am afraid that the Yucca Mountain management plan now has been so emasculated by the actions taken in Nevada, by the inability to get air permits to start the kind of site characterization so necessary to determine the suitability of that particular potential repository site, that we have a whole new ball game.

We have got to go back now and restructure that plan, and that is what I am about to do. But I am not going to publish that restructured plan until I get the WIPP project out in the open, everybody agreeing to it, and we start down the path that is so necessary to get that site open.

Frankly, the repository in Nevada is a lower priority to the national defense, than the WIPP site. I cannot handle both at the same time.

We now have a law passed by the State of Nevada and signed by the Governor, that says you will never put waste there. I have a law, passed by this Congress, that says, "By golly, you will go study it.

The State has refused to act on air permit applications for almost 2 years. I will at some point have to take tough action. But

I look at my own plan for Yucca Mountain and, frankly, it is not unlike that which I found in the WIPP situation, where we do not have a good, solid, integrated plan. Reality says we are going down a path that is mythical. It has no reality to it because we have not accomplished any of those milestones. So, I must have a whole new plan.

I mean, I walked in here with the thing already a year and a half behind, and now it is a year and a half plus 7 months behind.

Senator McCLURE. And from what I understand you to say, it is going to be a year and a half plus 7 months plus some other period of time.

Secretary WATKINS. No, sir, it is not. It is going to do better than that because I am going to have this plan out shortly after I have the WIPP plan briefed to you all, to the Governors next week. That will be the first draft of the WIPP start-up plan. It will be approved by the National Academy of Sciences, and it will be approved by all the blue ribbon panels, all the State representatives.

Everybody that has been in the game will look at that plan because I will bring it into conformance with their recommendation that says unless you include these things, you do not have a plan. Well, I have got it all in that plan.

When I get that out and approved and published—and we are going down that check list—I will deal with Yucca Mountain. I cannot handle both at the same time because I believe that the WIPP opening is a precursor to getting on with whatever happens in Nevada.

Even though they are uncoupled, I recognize that technically in the minds of the public they are coupled.

The CHAIRMAN. Would the Senator yield?

I just thank the Senator for yielding.

I just want to say, I certainly approve of what you say about the priority of getting WIPP open first. I think we must do that.

I met with the Administration's potential nominee for Director of the Office of Civilian Radioactive Waste Management, Mr. Bartlett, this last week. On the subject of Yucca Mountain, I pointed out that we need to do that properly, safely, legally, and with as much sensitivity to the feelings of the people of Nevada as possible. But at the same time I pointed out that we have been wasting hundreds of millions of dollars—hundreds of millions of dollars—in Nevada, and we simply cannot afford to continue to put on the backs of the ratepayers of this country the kind of obligation that we have been shouldering them with. It is probably going to require a raise in rates even if you do it in the best way possible.

So, I know you are sensitive to that, but it bears repeating. I think you will find support in this committee to do what you need to do to accomplish that which is necessary to do it—in a way that is safely, properly, environmentally correctly, legally and sensitively. But we need to get it done and not to waste those hundreds of millions of dollars.

I thank the Senator for yielding.

Senator McCLURE. Of course, I agree with everything you just said. I will not take the time this morning, but I would also invite you to add one other burden to those you already have. I hope the chairman agrees with me on this, too.

There is an alternative in the law for monitored retrievable storage, and I have always believed that that had more potential in the near term than did geological storage for all of the reasons that we are confronting at Yucca Mountain and at WIPP.

Secretary **Watkins**. I agree with that, Senator McClure. As you know, they are coupled together in the law.

One of the things I am worried about is the impact on the MRS work. Now the MRS Commission study will come out in November, and I do not know how it is going to come out. I assume it is going to say MRS makes a lot of sense. I cannot imagine it not saying that.

So, I believe that we are on the threshold, and I am going to commit myself before this Committee that within a month there will be a new, completely restructured look to the waste repository program at Yucca Mountain, in accordance with the legislation, that I can stand behind. I will be able to say, "that is the plan—it is the right plan." We are going to go down that check list, and it will have the elements of controls in there that I feel are necessary for me to comply with the law.

I think then I can get a little bit tougher. I hate to get tough when I find I have a lot of achilles heels within my own plan that need to be addressed. It is the same kind of thing I ran into with WIPP.

So, if you will allow me another month, I think we will move out aggressively. That is why I have remained quiet A lot of other people have talked about it, talked about our insensitivity to the Nevadans and the "Screw Nevada Bill of 1987." I have read all that. I am trying to get out of that contest and do what you asked me to do, which is to get the site characterized so if there is volcanic action or other problems we will find that out.

If they need to have technical oversight and scientific oversight, we have already agreed to that. Come on in and take a look with us. Look over our shoulder. Do you want a computer? Sure. There has to be some payback at some point. If they want to have all that money that you have allocated, I ought to have the authority to say, "Hey, no tickee, no laundry." If you want to get on with this thing, then let us get on with it, but let us share the burden. Let us get our air permit. How about that for the first indicator that maybe we can work the characterization.

If the site does not pan out, we are going to have to come back to you and find an alternative. We are quietly looking at alternative strategies today, but we believe that there is no indication that that site should not be completely researched and characterized. That is what we are all about. We are not trying to be presumptive and say that repository must go there. We are saying we must do the research in accordance with the law. That is all we are trying to do right now.

Senator **McClure**. Again, Admiral, I commend you on your statement. I hope people were listening carefully because the statement has a lot of meat in it, and it also indicates that you are moving forward.

Secretary **Watkins**. I have been accused of being a wolf in sheep's clothing, trying to sweet talk them into something they do not want, Senator McClure.

Senator McClure. I have heard that said.

Secretary Watkins. That is one of the reasons we have been held up for 2½ months.

Senator McClure. That is not all I have heard said, Mr. Secretary. Thank you.

Thank you, Mr. Chairman.

The Chairman. Thank you.

Mr. Bingaman.

Senator Bingaman. Thank you for bearing with us through all our votes this morning.

Let me ask just one other question on the WIPP project. You have referred to it here, and I gather you did in answer to Senator Wirth's questions as well.

One of the key questions or issues that has risen on the WIPP project in our State and which we have discussed before is the concern that plans to put waste at the site could be driven more by the need that DOE has to find a place to put waste than by the need to actually conduct legitimate experiments.

Are you in a position today to indicate whether the position of DOE or your position is clarified on that? If not, I understand. Is it clear that with regard to WIPP project, to the extent that waste would be taken to the site or plans would exist to take waste to the sites, those plans would be driven by the need to do research rather than by the need to fix the problem created by the Governor of Idaho or the Governor of Colorado or something?

Secretary Watkins. Yes, sir, it is. That is the way we are running it. That does not mean that we would agree at this point that there is not a need for optional testing at some point consistent with the fundamental research the National Academy says is necessary; for example, the .5 percent of the volume that we need for research.

So we believe at some point that is going to be another argument, but we happen to think that there is a need for the operational demonstration phase.

There is also going to be a question that will be raised about alternative storage sites in the event that we cannot start, on March 1, sending things to WIPP. Alternative storage sites, therefore, are going to be a major and potentially contentious issue. That is going to come up here in the very near future when our plan is presented to you next week.

Without any question, people are going to say, "Not in my State." All right, we are going to have to face that issue, and we are going to need help from this committee to have a rational approach to that. It does not put that burden totally on the Department of Energy. There has to be a recognition that if you believe our plan is right and we can define the waste and confine it within certain bounds, "boxcar equivalents," and let us say over a 2-year period then we have to find a place for 48 boxcar equivalents. If I can identify seven States, and you divide seven into 48, then you have about seven boxcars over the next 2 years that somebody has to put on a RCRA-approved site. It seems to me that that is not an unfair approach.

Now can we do that with the hardening of positions by Governors? I have no idea, but I am going to need help from this committee and the Armed Services Committees in both Houses, to come on board and say come on, do not give that burden only to me, let us try to solve this problem in the interest of national defense because we now have the problem bounded. I am not asking for a blank check. We are asking for very specific things.

I have gotten some informal indication from some very fine Governors trying to support me that under those circumstances they may be willing to change points of view. I hope we have that kind of flexibility and that these people do not get in such hardened positions now that they are dogmatically saying things that they may have to eat later on.

Let us try to work together. I think you will see that my plan, when it comes out, is fair and reasonable in that regard.

Senator BINGAMAN. Thank you very much. I compliment you for stepping back and trying to take a fresh view of this entire set of issues because it is obvious that that was needed. I look forward to being briefed on your plan.

One concern that I have had here for the last several months is this Department of Justice criminal investigation that commenced, I believe, in early summer when we had all these FBI agents lined up one morning to go into the Rocky Flats plant.

Secretary WATKINS. It had actually started 11 months before, Senator Bingaman, but it was not known to me until 1 month before the paratroopers dropped in on them.

Senator BINGAMAN. The question that I have, is do you have any information you can give us about the status of that investigation, particularly as it affects the Albuquerque area office?

As you know, the integrity of the Albuquerque area office is a crucial part of your ability to be effective. That office oversees WIPP; it oversees a lot of the important activities that go on in DOE.

I think I said at the time and I still say that I think it is a bit unfair for the Department of Justice to paint with such a broad brush that you cast out on a lot of people who are not in fact guilty of any kind of activity who ought to be reprimanded.

So I do not know if you have anything you can say at this time. My own interest is seeing to it that if there is any kind of criminal activity, obviously it needs to be prosecuted to the fullest. If there is no criminal activity in that Albuquerque area office, I think it needs to be cleared up and the Department of Justice needs to make that clear so that your ability to manage through that office is not impeded.

Secretary WATKINS. You and Senator Domenici have raised this issue before, and we did look into this because we were concerned about the same thing that you just expressed.

It is my belief that we have gotten over the toughest part of that by changing contractors out there, for one reason; by sending out a very competent team of experts to review the bidding; getting our management act together out at Rocky Flats; and more or less identifying where the real ills were.

The only thing I would say about the Albuquerque Office is they do own Rocky Flats for administrative purposes; therefore, they must share some of the burden of the situation that existed there in terms of identifying the problem areas sufficient for headquarters to do anything.

Now I blame headquarters, too, so do not get me wrong. I am not trying to pick any blame. On criminal action, however, there is nothing that I have seen so far that indicates any criminal action.

I would like to ask the Deputy Secretary whom I asked to look into this in specific terms after Senator Domenici raised the issue the last time, to augment my comments. Maybe he has additional comments on that specific issue.

Mr. MOORE. Senator, we have been in touch with the U.S. attorney who is handling this case, and we have been told that, in accordance with normal criminal investigation procedures, they really are not going to share any information with us about their targets and the specificity beyond the affidavit that was made public.

We do not know any more about it than you and we are not going to be told. The only thing that we will be told, I assume at the same time you will be or anybody else is, is if they decide not to pursue it before the grand jury, we might be told that. How long it will take, they are guesstimating 6 months to a year. Because of the mountain of documents that they retrieved or that they got from Rocky Flats, it will take them a long time to go through that.

So they really are not sharing any information with us, but I am being told there is nothing unusual there, that they do not do in the line of criminal investigations.

We have an agreement with them that if any information is uncovered by them that leads them to believe that there is anything going on at Rocky Flats that would jeopardize the health and safety or environment of the people who work there or live nearby, they would share that with us so that we could do something to prevent that. Thus far, no such information has been given to us.

Senator MCCLURE. Would the Senator yield on that?

Senator BINGAMAN. Yes.

Senator MCCLURE. That also raises one issue that is not really settled by the letter from the Department of Justice, and I commend the attorney general for having assisted in trying to set forth a prospective policy.

I am sure the attorney general will say privately what he might not wish to say publicly, and that is the Attorney General of the United States does not control U.S. attorneys. United States attorneys oftentimes take actions on their own and I do not see any reason why we can believe this letter necessarily controls the actions of an individual U.S. attorney.

The second question that is not solved by this, and it is a serious one in some places, it also has no effect upon the application of State law, or the activities of State law enforcement.

The contractors have both of those problems to contend with, with respect to on-going activities.

Secretary WATKINS. I think the support, however, Senator McClure, that we are receiving from all the Governors who are allowed, under this openness policy, to bring in their best experts—whether it is in health, environmental, or safety issues—and participate with us in the development of the various agreements, such as the Tri-Party Agreement in Washington, such as the agreement with the Governor of the State of Colorado that recently was signed by me, these compliance agreements with the States, I think, set a very positive tone that we recognize that we are in violation of both State and Federal law.

We have agreement with the EPA Administrator, in the case of the Federal Government, with the State, and with the DOE contractor who operates these sites, to get out from under this situation, so I think it is the combination of the Justice letter with the compliance agreements with the States that makes this workable.

So, it is not just that letter alone, it is also I would say, the implicit recognition by the States that we are trying to work together to get out from under it, so I cannot imagine that, in the State of Colorado, for example, after signing this agreement, that they would use the fact that we were in violation of the law as a—because it is tacit in the fact we have to have an agreement—to hammer us in court. It is not happening, and, therefore, I believe that everyone agrees that this is a logical approach under the circumstances.

Senator McClure. I thank the Senator for yielding.

Senator Bingaman. Mr. Secretary, while I was out Senator Wirth asked you about WIPP. Did you indicate a July 1 opening date at WIPP in response to the question.

Secretary Watkins. I am telling you now, Senator Bingaman, that I do not see us being able to take the first shipment of 0.5 percent of the volume at WIPP until July 1, and that is on the assumption that the plethora of issues that you will see in this very complex briefing that have to be addressed are all dovetailed together in the right way, including the no-migration petition, which is the first time the EPA has ever done such a thing.

It is a very complex issue and there are a lot of unknowns, so we are assuming if we do our job well, July 1. This says that we will need about two and a half box cars a month equivalent between March 1 and July 1 and that is what I talked about in the alternate site interim period.

Senator Bingaman. You are suggesting that as an earliest possible date?

Secretary Watkins. Yes, and I will also tell you in that briefing it may go longer. We have a lot of unknowns. We need legislative land withdrawal and we need that now. That is, we think with this plan in hand that Congress can craft, along with our support, the kind of legislative land withdrawal proposal that admittedly will have all the caveats that our plan has in it. Unless we have achieved those milestones, obviously, we are not going to open.

So you can put all the constraints on us, but we need to have the confidence that, when we go through this, we do not then have to start legislative land withdrawal. None of us want administrative land withdrawal, we want legislative land withdrawal, but let us not set up some barriers in here that say we cannot have anything until we prove that we can finally open the plant. Then it is too late.

So we really need help now to move, or legislate, land withdrawal right now, in this session of Congress, with the caveats in it necessary to recognize that we are not going to get on line until July 1 next year. But put any constraints you want on us in there to get back to you in the spring, report monthly or daily, whatever is necessary, to make sure we have that moving in parallel.

Senator BINGAMAN. Mr. Chairman, let me just compliment the Secretary in two other areas on which I will not ask questions.

You are to be commended for the effort you are making to put DOE more actively involved in the verification of arms control, and also the research component that you have identified for the hazardous waste clean-up program. I commend you on both of these initiatives.

Secretary WATKINS. Thank you.

Senator BINGAMAN. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Bingaman.

Secretary Watkins, on land withdrawal legislation, you believe it is important and I do too, that we get started in this session of Congress. That means right away. Do you want us to begin work on that which we have, or will you be submitting further modifications?

Secretary WATKINS. What I suggest, Mr. Chairman, is to allow this draft integrated start-up plan for WIPP to be briefed to you and the Governors, then let us receive your comments. We can have a quick turnaround on that. I believe within the next 2 weeks we can publish that plan, that start-up plan, which will have agreement of all the parties.

I think then we can craft a piece of legislation, help you do that, that says, "All right, you have to perform in this fashion, right down the list," and we can put any kind of provisions in there you want about making sure we are not trying to disguise the use of WIPP for something it was not intended for.

That is, that we are not going to use that willy-nilly with some kind of a gimmick like "operational tests," just to put drums in there. That is all in the plan now, and it is addressed, so I think it will be clean.

So if we can work with you within a couple of weeks to draft something, I think it is going to be acceptable to the New Mexico Congressional delegation and to the variety of other people that are engaged in this process.

The CHAIRMAN. In other words, you think we ought to withhold for a couple of weeks?

Secretary WATKINS. We can start the drafting now, Mr. Chairman, on the anticipation that the work we have done in coordination with the States so far and with you all up here has been sufficient to help us start.

I do not mean we cannot start doing some background work, but it will probably have to be modified over the next few weeks as we get the final comments, so I believe we could start right now in drafting up something that might be acceptable to you all.

Senator DOMENICI. Will the chairman yield?

The CHAIRMAN. Yes, certainly.

Senator DOMENICI. I just want to say to some extent what the Admiral is talking about here is news to me. Obviously, we have been waiting for a comprehensive plan that takes care of all the concerns.

Senator Bingaman and I have already cleared out of this committee our land withdrawal bill. The problem is, after we cleared it we found two things very significant: the New Mexico delegation did not support it. We are part of the New Mexico delegation.

Second, we found that a number of things that we were assuming had been done had not been done. While we conditioned a number of them because we knew of them, we did not even know how much you needed to do the research. You are using 5/10ths of 1 percent here today, which is one recommendation.

I assume you are telling us now that is going to be your final recommendation on research needs, so I say to the distinguished Chairman, at least speaking for one part of the New Mexico delegation present—I am not speaking for Senator Bingaman, but I greatly appreciate your interest in helping us.

On the other hand, I am quite convinced, if you want the New Mexico delegation, there are two of them right here and I think we will be part of this once we have seen what the Admiral tells us he has to give us.

It may or may not solve all of the concerns we have had. Most of our concerns are scientific and environmental, and they are quantifiable, and we want to make sure that he has proposals to do all those things.

There is another issue about the Environmental Protection Agency. I am really sorry we got into details here, piecemeal. We ought to have a plan in front of us, and I hope we will in the near future.

Secretary WATKINS. We will, Senator.

Senator DOMENICI. Nonetheless, I want to make one other comment, Mr. Secretary. You did a very good job throughout the country and in our state saying you were not going to set unreasonable deadlines. You threw all the deadlines out.

I think my friend, the Senator from New Mexico, Senator Bingaman, is trying to establish that you did not here today establish another one for us of July 1.

Secretary WATKINS. No sir, I did not. You will see, however, when this plan comes out next week, that there are a large majority of things out of my control. They belong to regulation and law. A little bit is in my control. You are going to see all of these things displayed in an integrated fashion, virtually without dates, except that, if everything goes well, it shows you that the date of July 1 cannot be bettered, that is all.

Senator DOMENICI. You cannot do any better than July 1?

Secretary WATKINS. I cannot do any better than that under any circumstances.

Senator DOMENICI. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Secretary, when will Rocky Flats reach its limits for storage of transuranic waste on site?

Secretary WATKINS. About March 1, 1990.

The CHAIRMAN. What are your plans for interim storage in the meantime?

Secretary WATKINS. The plan for interim storage will be addressed in this plan, called "Alternate Sites." It will explain the exact degree to which we need alternate sites—that is, how many "boxcar equivalents" of transuranic mixed waste it will be necessary to store somewhere over the interim period.

We will make some assumptions which say, perhaps there are seven States out there who are willing to share the burden for the interim period until WIPP start-up. WIPP start-up will start the ball rolling with the commencement of about 4,000 drums to be transshipped there for the research program. That will certainly help out in the near-term.

That will virtually get us to the point where we have a couple of years where we can work the research problems down at WIPP and hopefully solve the other problems as we move in to something more than 4,000 drums, which represents about .5 percent.

So that is all in this plan, and we have not picked the States, we have not picked the details of that, but we have put enough information in here to lay it right out on the table, and this is why I mentioned earlier that we are going to have to come to grips with the issue, that we are going to exceed the 1,601 cubic yards limit set by the State of Colorado.

I will give you the specific numbers, to what extent, and I will give you generally the risks that are involved between July 1 and day X—let me say, 2 years beyond that, perhaps—and how many "boxcar equivalents" and how many States would have to be involved, we think, and about how much per State. Let us say it has to be, maybe, seven boxcars per State over a 2-year period. Is that something that is reasonable? Will the Governors, or the Congressional delegations, be willing to accept that?

So that is in the alternate plan and I air it now, because I do not want to hide that. That is going to be a key issue and potentially controversial, but we have to solve it. Otherwise we are going to be in a situation where Rocky Flats then has to be shut down, and I do not believe any of us want that to happen in the interests of national defense.

The CHAIRMAN. Thank you very much. I have to go, and I will ask Senators Domenici and McClure to go ahead and ask their questions.

I want to say your testimony has been excellent this morning. I think the Department is in very good hands, as I said earlier, and we will help you in every way we can.

Secretary WATKINS. Thank you, Mr. Chairman.

Senator DOMENICI. Mr. Secretary, I will not take long. Perhaps my friend, Senator McClure, has a number of questions.

Senator MCCLURE. I will submit them for the record.

Senator DOMENICI. I indicated I had something I wanted to raise with you that, while it is relevant, it was not part of this nuclear clean-up discussion.

First, I wanted to commend you on what you are trying to do. I once again want to urge that the most significant part of your job is to retain a significant degree of credibility. I think that is the issue.

Let me change to the issue of uranium supply and talk for a minute with you so that when you get a letter from the New Mexico delegation which will be addressed to both you and the President you and your staff will be aware of a very serious problem that we have.

I need not put the history of the production of uranium before the committee. I could not do as well as you did with your history of the evolution of the Department. Suffice it to say that the State of New Mexico was the premier supplier of uranium for most of America's history.

There exists one mine in New Mexico commonly known as the Mt. Taylor mine. That is 2,000 feet underground, and it taps the remainder of the uranium that supplied America for most of the evolution of nuclear energy. It went on under a mountain, so somebody said we will go on under the mountain and we will find it. They did. What is sitting there is between 35 and 50 percent of America's current known recoverable reserves of uranium in one mine. It is 2,000 feet underground and needs about $6 million per year to pump the water out so that you have a viable mine with that huge recoverable reserve.

Chevron has announced its intent to close it on the basis of current market prices and inadequate demand. The New Mexico delegation is going to be sending a letter suggesting that this is very, very serious. If you could just put some boards up on top of it and close it up, that would be one thing. Literally, if it is abandoned, that is quote another thing because then it floods and there will be a serious prosect that we will have lost the entire reserve. That is the worst case.

The best case is that you will have added such a burden to ever recovering it again that you may have lost it for 30 or 40 years.

We are not in this case asking the Federal Government to put everybody back to work. We are asking that some serious consideration be given to whether the United States of America ought to let that happen.

I do not have an answer, but I have seen things mothballed in the past. You have probably seen a lot of that in the Navy. It appears to me that, at the minimum, we ought not to permit that recoverable reserve to disappear. The word keeps coming back to me that maybe as a minimal act we ought to mothball it in some way so that it would be available once again to the private sector if and when the market demands.

So that you will know, I am not asking the Government to bail anything out right now. We are all engaged in trying to find a broader market for that uranium. The Japanese did buy some uranium, as you know, and some of it will come from this company. If this mine closes we will have to get it somewhere else, I assume.

Clearly, when we have this kind of situation on uranium availability in the country and we are about to let this happen, we are going to do our share to try to find a market. We hope the House will pass a bill that puts the government at least in the position of preferring American uranium for some of its defense oriented enrichment activities. We passed that here, and we hope they will.

So we will do our share, but we really do believe that, not to add to your enormous burdens of which you have plenty, this is a pretty serious problem if, in fact, the owner is really not only committed to stopping production but is saying at the point in time when we cannot spend the $6 billion per year we will close it up.

Secretary WATKINS. We were alerted by you just a couple of months ago, Senator, on this issue. To that extent, I am familiar with the situation. I was led to believe at that time, and am still led to believe, that the expectation is that there will be enough interest by others to come in and that the mine will remain operable.

I also know that there is a Commerce Department report that has been submitted to the White House, dated September 26, on the national security implications that have to be assessed from time to time. Of course, per the law, it is our responsibility to see that when the potential loss of our natural resources in the Nation exceed a certain percentage, say it is 37.5 percent or something like that, we have to do an investigation on the national security ramifications.

That has been done. While that has been done to the penalty of us, we have reviewed the facts that went into that. The facts were correct. Now how you draw the conclusions on the national security ramifications, that is not my business; but that report has been submitted to the White House, and when they release that report, we will have an opportunity to review and comment on it.

At any rate, it is of concern to us just as it is in the enriched uranium business and how those imports are increasing, particularly those coming from the Soviet Union, which seems a little odd to me.

So all of these issues on uranium ore and enriched uranium are very critical to what I consider will come out of the National Energy Strategy. So we are concerned. I will look into your latest letter.

The latest letter we have sent to you, as far as I know, is still applicable regarding the Mt. Taylor mine, but we will take another hard look at this because, certainly, we would not want this just to happen without our involvement. So I will commit myself to do that for you.

Senator DOMENICI. Mr. Secretary, I want to close by just saying Senator Bingaman raised a very important question when he talked about the morale of a very large force. I am not sure what it is on independent contractors, but I can tell you that your Federal workers within the Department of Energy in the Albuquerque Office—clearly, it is one thing to go in and look at the records and show you FBI badges when you do it. It is another thing to leave it hanging for an inordinate period of time over the heads of many, many hundreds of truly dedicated people.

We are not in that office talking about last month or last week. We have 15 and 20 year veterans of this whole nuclear activity who are second to none. As a matter of fact I am quite sure that had they not had the tenure and their families, they would be suffering there from the inability to get them today, just as you are suffering in getting them up here, because they are not paid enough going in for their expertise.

So I hope that whenever you have a chance you will lift that pale from them and be more specific about who is to blame. It is not my job, but I do hope that those who are prosecuting the criminal matters understand that if they can get on with it, the rule ought to be early rather than late in terms of deciding who it is and where it is that has been finalized.

I have looked at the affidavit which justified the searches both at Rocky Flats and what turned out to be far less than a paratroopers dropping in in New Mexico. They just walked in, and everybody was very friendly. The FBI is there all the time. That is nothing terribly untoward, but the newspapers and the media regarding the criminal activities there kind of came out about the same.

So I concern myself about it. I know you are concerned. I just want to tell you again that whatever we can do to expedite that seems to me to be the Department of Energy's——

Secretary **Watkins**. I share your concern, Senator Domenici. It is one of the biggest crosses I have to bear as I go in and try to rectify the situation that has been longstanding and yet try to take away the implication that I am down on our people.

As you know, I talked to your people out at the office in Albuquerque. I could not have asked for a more responsive, bright-eyed group. They will do anything we ask them to do, but when we do not ask them to do what we should be asking them to do, I certainly do not hold them responsible for that.

I really do blame headquarters here in Washington for not setting the right tone, asking the right things of our people, and setting the right system in place. They have been unfairly swept up with this tainted brush. I have tried in all my outings in the field to make sure our people understand that I am not down on them.

I am down on a process that, really, I blame on headquarters mismanagement. I am not at all hesitant to say that. It is not only at the Albuquerque Office. It is at Rocky Flats. It is at Savannah River. It is at Fernald. It is at Mound now. We have a strike there. We have a lot of problems across the country in this area as we are going through this turbulent time, and I am trying to stroke our people as best I can in this process.

I have had multiple meetings with all my field bosses out there, including Bruce Twining from Albuquerque, and they are all with me on it. They know what I am trying to do, and they are part of the leadership necessary to tell our people to hang in there, you are doing your job. Everything we have asked you to do, you have done, just as they have done at WIPP. They have done a heck of a job at WIPP.

We cannot be down on the people there for any of the mismanagement that you have alerted us to here in Washington. So you and Senator McClure can help us, too, by saying the same things out there, that we are not down on the people. They are great. They are terrific. We want them to stay with us. We think a year from now we will get over this hurdle, and they will be even more proud of the work they have done because it will be highly credible with not only DOE and you all here but with the American people around them. That is most important.

Senator **Domenici**. Thank you, Senator.

We stand in recess.

[Whereupon, at 12:35 p.m. the hearing was adjourned, subject to the call of the Chair.]

DEPARTMENT OF ENERGY'S NUCLEAR FACILITIES

TUESDAY, OCTOBER 31, 1989

U.S. Senate,
Committee on Energy and Natural Resources,
Washington, DC.

The committee met, pursuant to notice, at 9:38 a.m., in room SD-366, Dirksen Senate Office Building, Hon. J. Bennett Johnston, chairman, presiding.

OPENING STATEMENT OF HON. J. BENNETT JOHNSTON, U.S. SENATOR FROM LOUISIANA

The Chairman. The meeting will come to order.

The purpose of today's hearing is to continue to receive testimony on the operations in management of the Department of Energy's nuclear facilities.

On October 5, the committee heard from the Secretary of Energy, James Watkins, on the status of his efforts to address the problem at the Department's nuclear facilities. Today we will hear from additional witnesses.

The main focus of today's hearing will be waste cleanup and environmental compliance at the department's nuclear facilities.

Last week, Senator McClure and I introduced a comprehensive bill to address the waste management problems confronting our Nation's nuclear defense facilities.

Senators Glenn and Wirth have also introduced bills to deal with some of these issues. The testimony was received on the Glenn and Wirth bills at our previous hearings.

The legislation introduced by Senator McClure and me last week, S. 1802, represents our reaction to the testimony received from Admiral Watkins at the October 5 hearing. S. 1802 attempts to codify initiatives taken by the department related to worker health and safety issues and radiation research.

In addition, S. 1802 contains provisions to protect whistle blowers at DOE nuclear facilities. The real thrust of the Johnson-McClure bill is Title VIII, the environmental compliance agreement title. S. 1802 would establish a process to bring the department's nuclear facilities into compliance with the environmental laws while maintaining the essential national security mission of these facilities.

A month ago the Rocky Flats plant almost had to close. Rocky Flats is our Nation's only producer of plutonium triggers for nuclear weapons. This would have placed our Nation's security seriously at risk. Rocky Flats was in violation of certain requirements of the Resource Conservation and Recovery Act.

Meanwhile, the Department of Energy's contract with Rockwell International Corporation, the operator of the plant required continued operation of the facility. Rockwell was faced with an untenable conflict. Close down or operate the facility placing its employees at risk of prosecution. As a result, Rockwell quit. Other Department of Energy nuclear facilities may well face similar problems.

The fact is that we simply cannot afford to take that chance. Federal facilities should handle waste in a responsible manner, but our nuclear facilities must operate. We simply must find a way to operate these facilities without entangling the Federal Government and its contractors in a web of conflicting laws that act as obstacles rather than solutions to responsible waste management. The process laid out in S. 1802 is our attempt to address this very important issue.

Today the committee will hear from a panel of administration witnesses from the Department of Energy, the Department of Justice, and the Environmental Protection Agency on the central issue of environmental compliance. Each of these agencies has a different perspective to offer on environmental compliance. One is the operator, one is the regulator, and one is the prosecutor.

We will also hear from a representative of Rockwell International. Our purpose is not to put Rockwell on trial for actions at Rocky Flats. We want Rockwell to provide us with perspective on the issue of compliance at Federal facilities.

By the end of this morning's session we should be able to hone in on responsible solutions for achieving environmental compliance.

Our last panel of witnesses today will be from the labor unions that represent the workers at the department's nuclear facilities.

We have a full schedule this morning, and I am anxious to get started. Our first panel of witnesses will be Steve Wakefield, General Counsel of the Department of Energy, Richard Stewart, Assistant Attorney General for the Land and Natural Resources Division of the Department of Justice, and Christian Holmes, Deputy Assistant Administrator for the Office of Solid Waste Emergency Response for the Environmental Protection Agency.

[The prepared statement of Senator McClure and the text of S. 1802 follows:]

OPENING STATEMENT
Senator James A. McClure (R-ID)
Committee on Energy and Natural Resources
Tuesday, October 31, 1989 (9:30 A.M.)

DOE NUCLEAR FACILITIES

Good morning. Today the Committee continues its examination of the issues of environmental health and safety at the Department of Energy's defense production complex.

We pick up where we left off several weeks ago, when Secretary Watkins and Deputy Secretary Moore testified on DOE's five-year plan for environmental restoration and waste management at its nuclear facilities.

I want to repeat something I said at that last hearing, because I want to remind my colleagues and our guests of something I think we have to constantly keep in mind as we discuss this critical issue: Simply pointing fingers doesn't deal with this problem. The Federal government -- that includes those of us in the Congress -- has an obligation to correct these problems and to modernize our defense production complex.

That's why I was pleased to join Chairman Johnston last Thursday as the principal cosponsor of the Department of Energy Nuclear Facilities Act of 1989 -- legislation that sets out a nine-point program for dealing with these environment, safety and waste management issues.

For existing DOE defense production facilities, the bill provides a procedure and timetable for addressing the environmental and safety problems that have plagued some of their operations. For new DOE facilities, such as the New Production Reactors and the Special Isotope Separation Project, the legislation will provide a framework that will ensure that the problems of the past are not repeated.

This legislation is one of three bills that the Committee will review this morning. I look forward to the testimony of our witnesses for their comments and observations.

101st CONGRESS
1st Session

S. 1802

To enhance nuclear safety at Department of Energy nuclear facilities, to apply the provisions of the Occupational, Health, and Safety Act to certain Department of Energy nuclear facilities, to encourage independent research on the effects of radiation on human beings, to establish a comprehensive program within the Department of Energy of research, development, and demonstration of methods for waste cleanup and remediation, to establish a process for ensuring cleanup of Department of Energy nuclear facilities, and for other purposes.

IN THE SENATE OF THE UNITED STATES

OCTOBER 26 (legislative day, SEPTEMBER 18), 1989

Mr. JOHNSTON (for himself and Mr. MCCLURE) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

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A BILL

To enhance nuclear safety at Department of Energy nuclear facilities, to apply the provisions of the Occupational, Health, and Safety Act to certain Department of Energy nuclear facilities, to encourage independent research on the effects of radiation on human beings, to establish a comprehensive program within the Department of Energy of research, development, and demonstration of methods for waste cleanup and remediation, to establish a process for ensuring cleanup of Department of Energy nuclear facilities, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be referred to as the "Department of Energy Nuclear Facilities Act of 1989".

SEC. 2. DEFINITIONS.

For the purposes of this Act—

(a) the term "nuclear facility" has the definition set forth in section 318(1) of the Atomic Energy Act of 1954, as amended.

(b) the term "Secretary" means the Secretary of Energy.

(c) the term "Department" means the Department of Energy.

(d) the term "compliance" means compliance with the substantive and procedural requirements of Federal and State environmental laws.

TITLE I—OFFICES OF ENVIRONMENT, SAFETY, AND HEALTH AND WASTE MANAGEMENT AND ENVIRONMENTAL RESTORATION WITHIN THE DEPARTMENT OF ENERGY

SEC. 101. OFFICE OF ENVIRONMENT, SAFETY, AND HEALTH.

There shall be within the Department an Office of Environment, Safety, and Health which shall be headed by an Assistant Secretary who shall be one of the Assistant Secretaries appointed as provided in section 203 of the Department of Energy Organization Act (42 U.S.C. 7133).

SEC. 102. OFFICE OF WASTE MANAGEMENT AND ENVIRONMENTAL RESTORATION.

There shall be within the Department an Office of Waste Management and Environmental Restoration which shall be headed by an Assistant Secretary who shall be appointed in addition to the Assistant Secretaries appointed as provided in section 203 of the Department of Energy Organization Act (42 U.S.C. 7133).

TITLE II—APPLICATION OF OSHA TO DOE NUCLEAR FACILITIES

SEC. 201. PLAN.

(a) The purpose of this title is to improve and enforce standards for employee health and safety at Departmental facilities.

(b) Within six months after the date of the enactment of this title, the Secretary, after consultation with the Administrator of the Occupational, Safety, and Health Administration, shall publish a draft plan to phase in application of the substantive requirements of the Occupational Safety and Health Act of 1970 at the nuclear facilities of the Department.

(c) The Secretary shall provide opportunity for public comment on the draft plan under subsection (b) and shall hold public hearings at least three Departmental nuclear facilities in different regions of the Nation before submitting a final plan to Congress under subsection (d).

(d)(1) The Secretary shall publish a written response to any comment on the draft plan that the Secretary considers substantial and shall submit a final plan under this section to Congress within one year after the date of the enactment of this title.

(2) The Secretary may implement the final plan under this section beginning ninety days after submission of the plan to Congress under paragraph (1).

SEC. 202. CONFORMING AMENDMENTS.

(a) Section 4(b)(1) of the Occupational Safety and Health Act of 1970 (29 U.S.C. 653(b)(1)) is amended—

(1) by striking out "Nothing" and inserting in lieu thereof "(A) Except as provided in subparagraph (B), nothing"; and

(2) by adding at the end thereof the following new subparagraph:

"(B) Beginning on the date that is five years after the date of the enactment of the Department of Energy Nuclear Facilities Act of 1989, this Act shall apply with respect to employment performed at facilities of the Department of Energy involved in the defense production missions of the Department of Energy.".

(b) The Secretary of Labor, in consultation with the Secretary, shall promulgate regulations to govern the application of the Occupational Safety and Health Act of 1970 to nuclear facilities of the Department in time to permit orderly compliance with the requirements of such Act with respect to the facilities of the Department under amendments made by subsection (a). These regulations shall include—

(A) the occupational safety and health standards to be applied at such facilities; and

(B) the manner and process of enforcement of the standards, including provisions for access to such facilities for purposes of inspection or investigation and for the safeguarding of information in possession of the Secretary that is designated sensitive or classified under other law.

TITLE III—RADIATION RESEARCH

SEC. 301. PURPOSES.

The purposes of this title are to—

(a) afford qualified independent researchers access to epidemiologically relevant data, information, and records in possession of the Secretary on persons who work or who have worked at nuclear facilities of the Department; and

(b) provide for the creation of a repository of such data, information, and records that can facilitate such access at significant cost savings relative to current practices.

SEC. 302. PANEL.

(a)(1) Promptly after the date of the enactment of this title, the Secretary shall appoint a "Panel for Evaluation of Epidemiological Programs of the Department of Energy" (hereinafter in this title referred to as the "Panel") composed of at least seven professional persons who by virtue of education, training, and experience are especially well qualified to evaluate the epidemiology programs of the Department and to make findings and recommendations with respect to such program as required under subsection (b).

(2) Upon request of the Panel, the Secretary shall promptly provide the Panel with—

(A) a complete listing of information, data, and records held or maintained by the Department and of potential use in the conduct and evaluation of epidemiological and related studies;

(B) a complete record of funds expended by the Department on research related to the health effects of exposure to radiation during any period of interest to the Panel;

(C) access to information, data, or records described in subparagraph (A) and copies of studies or reports supported under subparagraph (B); and

(D) any other information the Panel determines is needed to carry out the purposes of this section.

(3) The Panel, members of the Panel, and staff of the Panel shall take such steps as are necessary to ensure the confidentiality of information pertaining to individuals who are subjects of records reviewed under this section.

(b) Within two hundred and forty days after its appointment, or one hundred and eighty days after the date after the enactment of this title, whichever is sooner, the Panel shall submit a report to the Secretary making findings and recommendations as the Panel determines appropriate with respect to the Department's epidemiology data management and research programs, including programs of studies of the incidence, distribution, and control of disease that occurs as a result of or in connection with radiation or radionuclides. The panel shall examine and evaluate—

(1) the goals, objectives, and management of such programs;

(2) the resources needed by and available to such programs, including the needs of Departmental contractors and independent researchers involved with such programs;

(3) information, data, and record management in such programs, including questions of data completeness and accuracy, access and preparation of informa-

tion, data, or records for access, controls on information, data, or records affecting personal privacy or national security, and release policies for raw data, work in progress, and completed analysis;

(4) current and proposed mechanisms for storage and access to epidemiologically relevant information, data, and records in the possession of the Secretary;

(5) the utility and feasibility of transferring to another entity the epidemiologic research functions of the Department, including control of and responsibility for the necessary information, data, and records; and

(6) such other matters that the panel determines are relevant to the purposes of this title.

(c)(1) The Secretary shall provide the Panel with office space and administrative support as needed, shall make any of the facilities and services of the Department available to the Panel upon request, and may detail Departmental personnel to the Panel to assist in carrying out the duties of the Panel under this section.

(2) The Secretary of Health and Human Services shall cooperate with the Panel and provide, on a reimbursable basis, personnel and other assistance as requested by the Panel.

(d)(1) A vacancy in the Panel shall be filled in the manner in which the original appointment was made.

(2) A Chairman of the Panel shall be appointed by the Secretary. The Panel shall meet at the call of the Chairman.

(3) All members of the Panel shall be reimbursed for travel, subsistence, and other necessary expenses incurred by them in the performance of their duties.

(4) The Panel shall have a Staff Director who shall be appointed by the Chairman. The Director shall be paid at a rate not to exceed the maximum rate of basic pay payable for GS-18 of the General Schedule.

(5) Subject to such rules as may be adopted by the Panel, the Chairman may appoint, terminate, and fix the pay of such personnel as the Chairman considers appropriate. No individual so appointed may receive pay in excess of the maximum rate of basic pay payable for GS-16 of the General Schedule.

(6) The Director and staff of the Panel may be appointed without regard to the provisions of title 5, United States Code, governing appointments in the competitive service, and may be paid without regard to the provisions of chapter 51 and subchapter III of chapter 53 of such title relating to classification and General Schedule pay rates.

(7) Notwithstanding section 552(b)(1) or section 552(b)(4) of title 5, United States Code, the Panel may obtain from any department or agency of the United States information determined by the Panel to be necessary to carry

out this section. Upon request of the Chairman of the Panel, the head of such department of agency shall furnish such information to the Panel. Each person under contract with the Department to operate a Departmental facility shall cooperate fully with the Panel and provide the Panel with timely access to such facilities, personnel, and information of the contractor as the Panel considers necessary to carry out this section.

(8)(A) The Secretary shall provide that security clearances or access authorizations necessary for the Panel to carry out this section are granted as expeditiously as practicable.

(B) Members of the Panel and the Director and staff of the Panel shall handle all classified information and any other information to which access is restricted in accordance with existing law.

(9) The Panel shall cease to exist on the date which is thirty days after the date on which the Panel submits its final report.

(f) The Secretary may provide up to $1,000,000 from appropriations to the Department for fiscal year 1989 or 1990 for support of the Panel and its activities.

SEC. 303. REPOSITORY.

The Secretary, after reviewing the findings of the Panel under section 302 and after consultation with the Secretary of Health and Human Services, the National Academy of Sciences, and appropriate state agencies responsible for public health, shall establish within the Department an Epidemiologic Data Repository (hereinafter in this title referred to as the "Repository") containing research quality data and records without individual identification with respect to employees of the Department and of contractors to the Department at Departmental facilities on—

(1) the types and quantities of radiation and radionuclides to which such employees have been exposed;

(2) health, mortality, and morbility histories of such employees;

(3) demographic, occupational performance, and illness-absence characteristics of such employees;

(4) injuries and accidents at such facilities;

(5) autopsy results for such employees in the case of high internal depositions of radionuclides; and

(6) such other data, records, and information as the Secretary determines, based on the recommendation of the Panel established under section 303, will further the purposes of this title.

SEC. 304. INTERIM RESPONSE.

Until the establishment and readiness of the Repository, the Secretary shall grant access to epidemiologically relevant raw data of the Department to qualified independent researchers if—

(a) the proposal of such researcher has been favorably reviewed by scientists designated for such purpose by the National Academy of Sciences;

(b) the researcher agrees to conditions determined by the Secretary to be necessary to protect the confidentiality of personal records and the national security; and

(c) the researcher agrees to provide reimbursement for direct costs to the Department resulting from the access requested.

SEC. 305. AUTHORIZATION OF APPROPRIATIONS.

There is authorized to be appropriated to the Secretary to carry out the purposes of this title, not more than—

(a) $1,000,000 in fiscal year 1990;

(b) $5,000,000 in fiscal year 1991;

(c) $7,500,000 in each of the fiscal years 1992–1995.

TITLE IV—RADIOACTIVE WASTE REMEDIATION RESEARCH

SEC. 401. FINDINGS AND PURPOSE.

(a) Congress finds that—

(1) wastes generated at Departmental nuclear facilities may be simultaneously classified as solid wastes

under the Solid Waste Disposal Act (42 U.S. 6900 et seq.) and source, special nuclear, or by-product material under the Atomic Energy Act of 1954, as amended (68 Stat. 923);

(2) such mixed wastes are subject to differing and occasionally inconsistent regulatory requirements;

(3) there is a need for improved techniques, methods, and technologies for retrieving, handling, disposing of, stabilizing, treating, analyzing, and otherwise managing mixed wastes to ensure public confidence in the management of these wastes and to better meet regulatory requirements.

(b) It is the purpose of this title to establish a program of research, development, and demonstration in the Department to identify, develop, demonstrate and transfer to the private sector such improved techniques, methods, and technologies.

(c) As used in this title, the term "mixed waste" means materials in mixture or combination containing a species of constituent parts that is a solid waste under section 1004(27) of the Solid Waste Disposal Act (42 U.S.C. 6903(27)) and a species of such parts that is source, special nuclear or by-product material under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2014).

SEC. 402. PROGRAM.

(a)(1) The Secretary, in continuing consultation with the Administrator of the Environmental Protection Agency, the Nuclear Regulatory Commission, and the National Academy of Sciences, shall establish and maintain within the Department a comprehensive program of research, development, demonstration, and transfer to the private sector of advanced techniques, methods, and technologies for the management of mixed wastes generated at nuclear facilities of the Department.

(2) Within one year after the date of the enactment of this section, the Secretary shall submit to Congress a five-year plan for the program under this title.

(b) The Secretary shall designate a national laboratory of the Department as a technology research and development center for purposes of this title.

(c) The program under this title shall include at least one solicitation of private sector proposals for cost-shared joint ventures involving the Secretary and more than one private sector firm in the cooperative development, demonstration and transfer to the private sector of technology for the management of mixed wastes.

SEC. 403. MODEL PROGRAM.

(a) The Nuclear Regulatory Commission, in consultation with the Administrator of the Environmental Protection Agency, shall develop model standards and regulations for the disposal of mixed wastes generated at Departmental nuclear facilities. The model standards and regulations under this section shall, in the opinion of the Commission, provide reasonable assurance that the public health and safety will be protected if mixed wastes are disposed of as provided therein.

(b) The Secretary shall seek to enter into a memorandum of understanding with the Commission to carry out subsection (a) under which the Secretary will provide funding from appropriations to the Secretary for the development of the model standards and regulations.

SEC. 404. AUTHORIZATION OF APPROPRIATIONS.

(a) There is authorized to be appropriated to the Secretary to carry out the purposes of this title not more than—

(1) $20,000,000 for fiscal year 1991; and

(2) $50,000,000 for fiscal year 1991.

(b) Such sums as may be necessary are authorized to be appropriated to the Secretary to carry out the purposes of this title in fiscal years 1993–95.

TITLE V—MONITORING OF HEALTH AND RADIOLOGICAL CONDITIONS IN THE NORTHERN MARSHALL ISLANDS

SEC. 501. PURPOSE.

The purposes of this title are—

(a) to assure that the people of the northern Marshall Islands exposed to the fallout from the 1954

Bravo test receive medical monitoring and treatment for radiation related illnesses.

(b) to ensure that information about the radiological conditions resulting from the nuclear weapons tests conducted by the United States in the northern Marshall Islands is gathered, analyzed, and made available through the Department of Energy for rehabilitation and resettlement activities; and

(c) to provide experience and expertise to the Department of Energy in the detection, diagnosis, analysis, and mitigation of the effects of radiological contamination.

SEC. 502. DUTIES OF THE SECRETARY.

The Secretary shall continue to maintain a comprehensive program of radiological activities in the northern Marshall Islands. Such program shall include—

(a) logistical support for qualified activities;

(b) medical monitoring and treatment of exposed populations;

(c) whole-body assessment, including plutonium bioassay, as appropriate,

(d) environmental monitoring, analysis, and the continuation of research on mitigation strategies;

(e) acquisition, as appropriate, of capital equipment,

(f) a mechanism for external review of the activities of the program;

(g) technical assistance, as requested by the Government of the Republic of the Marshall Islands, for educational activities for the benefit of the people of the northern atolls to increase their understanding of the nature of radiation, and of the activities and findings of the program; and

(h) technical assistance, as requested by the Government of the Republic of the Marshall Islands, for rehabilitation and resettlement of the islands.

SEC. 503. REPORTS.

The Secretary shall report annually to Congress on the program under this title.

SEC. 504. AUTHORIZATION OF APPROPRIATIONS.

There is authorized to be appropriated to the Secretary to carry out the program under this title an amount not to exceed $6,000,000 for fiscal year 1991, $7,000,000 in fiscal year 1992, and such sums as may be necessary in subsequent fiscal years.

TITLE VI—WHISTLEBLOWER PROTECTION

SEC. 601. CONTRACTORS.

The provisions of 42 U.S.C. 5851 (relating to the protection of employees of licenses of the Nuclear Regulatory Commission) shall apply to each contractor (or subcontractor thereof) at a Departmental nuclear facility, as if such contractor (or subcontractor thereof) were an employer under 42 U.S.C. 5851.

SEC. 602. EMPLOYEES.

The provisions of 42 U.S.C. 5851 (relating to the protection of employees of licensees of the Nuclear Regulatory Commission) shall apply to each employee of a contractor (or subcontractor thereof) at a Departmental nuclear facility, as if such employee were an employee under 42 U.S.C. 5851.

SEC. 603. CONFORMING DEFINITIONS.

For purposes of this title, the term as used in 42 U.S.C. 5851—

(a) "this Act or the Atomic Energy Act of 1954" should be read as "this Act, the Department of Energy Organization Act, Federal or State environmental laws, or the Atomic Energy Act of 1954"; and

(b) "Commission" should be read as "the Secretary of Energy".

TITLE VII—MIXED HAZARDOUS WASTE

SEC. 701. CLARIFYING AMENDMENT TO DEFINITION OF SOLID WASTE.

Section 1004(27) of the Solid Waste Disposal Act (42 U.S.C. 6903(27)) is amended—

(a) by inserting "(A)" after "(27)";

(b) by striking out ", or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923)"; and

(c) by adding at the end thereof the following new subparagraph:

"(B) The term 'solid waste' does not include—

"(i) source, special nuclear, or byproduct materials as defined in section 11 of the Atomic Energy Act of 1954, as amended (68 Stat. 923);

"(ii) waste emplaced in a repository, as defined in section 2(18) of the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10101(18)); or

"(iii) waste emplaced in the Waste Isolation Pilot Plant authorized under section 213 of the Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act of 1980 (93 Stat. 1265).".

SEC. 702. APPLICABILITY OF AMENDMENTS.

This title and the amendments made thereby do not—

(a) alter existing authority of the Secretary to regulate source, special nuclear or byproduct material when in a mixture or combination with a solid waste; or

(b) affect, modify, or amend the Uranium Mill Tailings Radiation Control Act of 1978.

TITLE VIII—NUCLEAR FACILITIES CLEANUP COMPLIANCE AGREEMENTS

SEC. 801. NEGOTIATION OF AGREEMENTS.

(a) Except as provided in subsection ~~(b)~~, not later than twelve months after the date of enactment of this Act,

(1) the Secretary;

(2) the Administrator of the Environmental Protection Agency; and

(3) each State in which is located such nuclear facility of the Department,

shall complete negotiation of a nuclear facility compliance agreement with respect ~~to any~~ such nuclear facility that the Secretary determines is not or may not be in compliance with the substantive and procedural requirements of Federal and State environmental laws on the date of enactment of this Act.

(b) Nothing in this title affects or requires the modification of any agreement entered into prior to the date of enactment of this Act.

SEC. 802. CONTENT OF AGREEMENT.

The compliance agreement referred to in section 801 shall, with respect to each nuclear facility of the Department, include the following:

(a) an inventory of environmental violations at the facility that require cleanup and abatement;

(b) a schedule for achieving compliance with milestones and deadlines;

(c) provisions for independent State validation of environmental monitoring data;

(d) an agreement as to the type of notice that shall be given if there are any violations of the agreement or Federal or State environmental law;

(e) provisions which would extend the coverage of the agreement to any contractor operating at the facility (including any official, officer, director, employee, agent, or subcontractor of such contractor); and

(f) a requirement that the Department immediately amend any contract for the operation and maintenance of the facility to incorporate the terms of the agreement.

SEC. 803. FAILURE TO REACH AGREEMENT.

(a) Within twelve months after the date of enactment of this Act, the Secretary shall provide a report to Congress on any failure to reach agreement in accordance with section 801 and include an explanation of the reasons for such failure. At the request of a State involved in the negotiation under section 801, the Secretary shall include in the report an explanation of the reasons for the failure prepared by such State.

(b) At any time after the date on which the Secretary notifies Congress of failure to reach agreement with the State, the Attorney General or the State involved in the negotiation of the compliance agreement may institute an action in the United States District Court having jurisdiction over the nuclear facility for which agreement cannot be reached, to determine the content of a compliance agreement. Such an action shall be the exclusive means by which a failure to reach agreement may be resolved. The content of any compliance agreement imposed by the United States District Court shall be in accordance with section 802 of this Act.

SEC. 804. JUDICIAL REVIEW AND ENFORCEABILITY OF AGREEMENT.

(a) Actions to enforce the terms of any agreement entered into under this title may only be brought by the Attorney General, on behalf of a party to the agreement other than the State, or by the State in accordance with subsection (b).

(b) In the event that the Secretary and the Attorney General, within sixty days after a request by the State, fail to enforce any term of an agreement entered into under this title, the State may bring an action in the appropriate United States District Court to enforce such term.

SEC. 805. ENFORCEMENT OF COMPLIANCE WITH ENVIRONMENTAL LAWS PENDING COMPLETION OF AGREEMENT NEGOTIATION.

(a) Upon a finding of noncompliance by the Secretary under section 801, pending the completion of an agreement by the parties or by the court with respect to a nuclear facility of the Department under section 801, the Department and any contractor engaged in operations at the nuclear facility (including any official, officer, director, employee, agent or subcontractor of the Department or any such contractor) shall not be subject to any actions, whether civil, criminal or for administrative findings, order, fines or penalties under Federal or State environmental law, or for any liability in torts, damage, or other award based upon failure to comply with such environmental laws, which arise in connection with operations at such nuclear facility during that period.

(b) Once an agreement has entered into force, conformance with the terms of the agreement shall be deemed to satisfy all substantive and procedural requirements of Federal and State environmental laws.

(c) The provisions of subsections (a) and (b) shall not apply to actions resulting from willful misconduct by the Department or a contractor at a nuclear facility that threatens human life.

(d) The provisions of subsections (a) and (b) shall not apply to violations in existence and known but not under negotiation or not included in the compliance agreement once in force.

SEC. 806. USE OF PENALTIES AND FINES.

Funds collected by a State through penalties and fines imposed for violations of any substantive or procedural requirement of Federal or State environmental laws with respect to a nuclear facility within such State shall be used by the State only for projects designed to improve or protect the environment at such facilities or to defray the costs of environmental protection or enforcement at such facilities.

SEC. 807. PAYMENT OF ATTORNEY FEES.

(a) If the requirements of subsection (b) are met, the Secretary may pay, from funds available to the Department, attorney fees incurred by a individual in connection with a civil action, criminal indictment, or criminal prosecution for violation of the substantive or procedural requirement of a Federal or State environmental law. The Secretary may pay attorney fees in advance of final disposition of the action, indictment, or prosecution upon receipt of an undertaking by the individual to repay the amount advanced if the Secretary determines ultimately that the individual is not entitled to payment of attorney fees under this section.

(b) The Secretary may pay attorney fees under subsection (a) if the Secretary finds the individual—

(1) is an agent, officer or employee of the Department;

(2) was acting in good faith and in compliance with applicable rules, regulations or orders of the Secretary;

(3) had no reasonable cause to believe the conduct was unlawful; and

(4) was acting within the scope of the assigned duties of the individual.

The CHAIRMAN. Before we begin with Mr. Wakefield, Senator Ford, did you have anything?

Senator FORD. I will yield, Senator.

The CHAIRMAN. Senator Wirth.

STATEMENT OF HON. TIMOTHY E. WIRTH, U.S. SENATOR FROM COLORADO

Senator WIRTH. Very briefly, Mr. Chairman. I want to welcome the panel here, particularly Mr. Stewart. I believe this is the first opportunity he has had to appear before the committee. We welcome you to the administration in Washington.

Mr. Chairman, the legislation that you and Senator McClure have proposed leaves aside an extraordinarily important issue that has been the focus of the workers at Rocky Flats, as well as the public living near by Rocky Flats, and that is the question of worker health and public health.

We have represented here, as you point out, the operator, the regulator and the prosecutor, so to speak. What we do not have here is someone to knowingly speak about radiation health effects—a deep concern at Rocky Flats.

I cannot stress enough, Mr. Chairman, the deep concern that citizens who live near and around Rocky Flats have for the question of health. They want and need to know the impact Rocky Flats has and will have on their health. But we do not know. The reason that we do not know is that this data has been accumulated by the Department of Energy, the operator, managed by the Department of Energy, the operator, and made public when deemed appropriate by the Department of Energy, the operator. There has been no independent voice—and I underline the no—there has been no independent voice to assure the public about the health of the workers and about the health of that public.

Now, Rocky Flats, I would remind the committee, is 12 miles from downtown Denver. The prevailing winds, which are very significant coming down the front range, blow from Rocky Flats into the city. People are deeply concerned about this, particularly when we are in a situation where a strike force is put together of EPA officials, U.S. Attorney officials, and the FBI going in to Rocky Flats and saying that the contractor and DOE are not running this thing right.

How would we all feel if we lived near there or were working there or had kids growing up within the prevailing wind pattern?

There is absolutely no trust about what the Department of Energy is doing to protect the public health, and we compound that by refusing to develop an independent voice for looking at health data. There is no independent voice.

I have asked Secretary Watkins, "Why not?" What is the problem with developing, putting health research and the monitoring of health in an agency where it belongs, the Department of Health and Human Services? Why do we continue to insist on allowing the fox to guard the chicken house?

We are going to continue to have problems. We will continue to have a public that does not support this facility. We will continue to walk right into one problem after another if we continue this very short-sighted approach.

I would hope, Mr. Chairman, that as we get to marking up this legislation that we can see the importance of not burying our heads in the sand anymore about this, but coming on and saying let us have an independent assessment.

That is the thrust of the legislation that I have offered. The workers who are there want this approach. The people who live around the plant want this kind of research. The states involved want a similar sort of thing, and yet once again, the Department of Energy and the administration are stonewalling this.

I think that is a very short-sighted policy and would hope that we could persuade people not to pursue that any further. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Wirth. I might add that I did not dwell on health issues in my opening statement, and that is largely because we are having a hearing focused on health issues on November the 13th. This is not to say that health is not at the core of today's hearings, but I did not focus on dealing with these issues today.

Senator WIRTH. Mr. Chairman, we do not have the administration, I do not think, do we on the 13th, the witnesses? And I wanted to get their response.

The CHAIRMAN. No, we do not.

Senator WIRTH. Well, then, I think it is appropriate that the administration witnesses understand this concern and respond to it. I think that that is an important element for us to have. Thank you, Mr. Chairman.

The CHAIRMAN. All right. So, let us begin with Mr. Wakefield.

STATEMENT OF STEPHEN A. WAKEFIELD, GENERAL COUNSEL, DEPARTMENT OF ENERGY

Mr. WAKEFIELD. Thank you, Mr. Chairman.

Members of the committee, I appreciate the opportunity to appear before you today and discuss the Energy Department's efforts to bring our facilities into compliance with environmental laws.

I have commented in my written testimony on three bills, S. 972, which Senator Wirth has introduced and just discussed, S. 1304, introduced by Senator Glenn; and S. 1802, which you and Senator McClure introduced last Thursday, Mr. Chairman.

With your permission, I would like to submit my full testimony for the record.

The CHAIRMAN. Yes. Without objection.

Mr. WAKEFIELD. Thank you, Mr. Chairman.

I would like to focus my comments here today on our present compliance efforts at DOE and on what we perceive to be a general need for legislation in the area, and then to specifically discuss Title VIII of S. 1802, which you and Senator McClure introduced.

Mr. Chairman, I know this committee is familiar with Admiral Watkins' many efforts to turn the DOE management culture around and to send the strong, clear message that our defense production facilities can be run in an environmentally safe manner.

The efforts by Admiral Watkins in this regard are listed in my testimony in part. I know that you are aware of them. I would report to you today that they are having an immediate and positive impact in reshaping our management culture at DOE, with our contractors, and at our facilities.

One of Admiral Watkins' top priorities is to bring all DOE facilities into compliance with Federal and State environmental laws as rapidly as possible. In order to place these compliance issues in context, let me review how DOE got to its present state.

Although RCRA, the Resource Conservation and Recovery Act, was enacted by Congress in 1976, a judicial determination of its applicability to DOE facilities was not made until 1984, and then the coverage of all DOE radioactive waste under RCRA was not clarified until 1987 by the Department's so-called "by-product rule."

Under these circumstances DOE and its employees and contractors have only been on notice of the need for compliance in this area for just over 2 years. Someone suggested this was like holding a child out of kindergarten and elementary school, then finally letting him go to school as a junior in high school and saying, "now catch up with your contemporaries."

Since the resolution of this issue, however, DOE has entered into 20 compliance agreements with either the EPA or the appropriate State environmental authorities or both to bring its facilities into compliance with RCRA, and we're currently negotiating 11 additional compliance and cleanup agreements.

We're making reasonable progress in entering into compliance agreements, and I would suggest to you that the easier ones come first. The more difficult ones may be down the road.

We do have some concerns in this area which I would like to share with you today. First, for the compliance agreements to be truly effective, they must identify and then address all of the environmental problems at a facility. To achieve this objective DOE employees and contractors should be encouraged to seek out and disclose the information about matters of noncompliance, about violation of environmental laws. We need to make clear to our employees and to our contractors and their employees that prompt, good-faith efforts to disclose environmental problems and to move promptly toward compliance with environmental laws are the goals of our new management culture and that these efforts will not subject those acting in good faith to criminal prosecution.

The compliance agreements identify findings of noncompliance at the facilities and set schedules for taking corrective or cleanup actions. The agreements do not, however, absolutely preclude prosecution for the underlying environmental violations that continue to occur while they're being corrected.

If sanctions for ongoing violations occurring within the contemplation of compliance agreements were suspended, the incentives to disclose violations, then enter into compliance agreements dealing with those violations, and then fulfill those agreements would be considerably enhanced. In this regard, I believe that the recent letter from the Justice Department to DOE and EPA which set forth Justice's views with regard to the exercise of its prosecutorial discretion in environmental compliance matters goes a long way toward providing our contractors and employees with proper encouragement to disclose environmental violations.

I would note particularly that letter's emphasis upon the significance of full, prompt disclosure and subsequent efforts to achieve compliance or remediation as bearing upon the exercise of Justice's prosecutorial discretion. Mr. Chairman, we support provisions which would induce individuals to fully and completely identify and correct environmental problems at our facilities while preserving the option to prosecute individuals for past misdeeds or the failure to disclose or otherwise not acting in good faith.

People who have in good faith identified environmental violations, entered into compliance agreements and who are fulfilling these obligations under those agreements should not live in fear of criminal prosecution for an ongoing instance of noncompliance with environmental laws and regulations.

Secondly, because we have many complex and difficult environmental problems at our facilities which require significant planning and resources to correct, we must develop a strategy to address these problems in an orderly and comprehensive manner. Admiral Watkins' Five-Year Plan does this. The Five-Year Plan, which was developed with broad participation by State and tribal representatives and affected Federal agencies and others, addresses environmental requirements in a unified, prioritized and coordinated fashion by examining projected actions and expenditures over a 5-year planning period. It enables full and continued public comment by all interested parties, and it will be updated on an annual basis.

Only by examining our environmental problems in a unified manner and on a basis that takes into account national concerns and our obligations to comply with environmental law can we effectively and efficiently resolve these problems.

Mr. Chairman, I urge that you consider this long-range planning as you move forward to address legislation in this area so that we may be assured of prompt implementation of this national environmental compliance and cleanup strategy.

Mr. Chairman, I would like to turn now to Title VIII of S. 1802, which addresses nuclear facility cleanup compliance agreements. Because S. 1802 was just introduced last week, there has been insufficient time for the Administration to review this bill comprehensively and develop an overall position on it. So, accordingly, my comments here today on S. 1802 represent the preliminary views of DOE only on some of its most important features.

In this context in addition to my general comments on the need for legislation in this area, let me briefly list my specific comments in this area. First of all, there is a definitional problem in the bill in that the term "nuclear facility" does not include all DOE facilities that could be covered by compliance agreements or orders.

The CHAIRMAN. Should it be made clear or should it be expanded?

Mr. WAKEFIELD. I think it should be expanded so that it covers other facilities that may not fall strictly within the definition of nuclear weapons plants. For example, our Pantex Plant in Texas and the Mound facility in Ohio.

Secondly, I believe that some sort of dispute resolution mechanism is essential if compliance agreements cannot be negotiated by the parties within a specified period. However, I am concerned with the mechanism that is set forth in section 803(b) of your legislation which would require that if compliance negotiations are not completed within 12 months an action in U.S. District Court may be instituted to determine the content of a compliance agreement.

First, we believe it is the Executive Branch's responsibility to negotiate and finalize compliance agreements. The negotiation of this type of an agreement properly rests with the affected agencies and, in my view, should not be delegated to the judiciary.

Second, we believe this provision would delay the resolution of compliance agreements and perhaps even provide incentives for a recalcitrant party to refuse to participate in the negotiation process at all.

I do not believe the federal judiciary is the most efficient or appropriate forum for the negotiation or ultimately for the imposition of a complex environmental agreement.

What we would recommend is that if the DOE Secretary and the EPA Administrator or the appropriate State authority cannot agree on the terms of a compliance agreement within the specified time, then the Administration should set up a mechanism to resolve the differences, subject to the direction of the President. In this way the views of all the parties would be fully and fairly examined, but the incentive would remain for all parties to finalize a compliance agreement on a voluntary and negotiated basis rather than having the terms imposed.

As I mentioned at the outset, my written testimony provides comments on other titles to S. 1802 as well as to S. 972 and S. 1304. I think it is clear by now that the Administration and that DOE in particular strongly supports Federal facility compliance with environmental statutes. The Administration believes that further administrative and legislative action may prove to be useful to enhance this effort.

I have indicated today several provisions of S. 1802 that would be helpful to the Department in addressing the long-term solution to our environmental problems. S. 1802 hits much closer to the mark than other bills which have been introduced in the Senate. Some of these bills would be helpful, perhaps even necessary, if we were just looking at last year's data, but I believe they are now less useful, given Admiral Watkins' initiatives and the current direction of the Department.

I and other members of the Administration stand ready to work with you to see that legislation addressing the environmental problems we face at DOE facilities is crafted in a way that aids in solving these problems.

In conclusion, Mr. Chairman, as you are well aware, Admiral Watkins has made substantial progress in addressing the massive environmental problems that he found when he arrived at DOE and that plague the Department and our facilities. We are fully dedicated to complying with all environmental laws and to running our defense facilities in an environmentally safe and healthy manner.

We appreciate very much the full and helpful support which we have received from this committee in this area as well as in the area of seeking competitive salaries for key Department officials involved with resolving our environmental compliance and cleanup problems.

We look forward to your continued counsel and support and cooperation. Thank you very much.

[The prepared statement of Mr. Wakefield follows:]

STATEMENT OF
STEPHEN A. WAKEFIELD
GENERAL COUNSEL OF
THE DEPARTMENT OF ENERGY

BEFORE THE
COMMITTEE ON ENERGY AND NATURAL RESOURCES
OF THE
UNITED STATES SENATE

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

I. Introduction

I appreciate this opportunity to discuss with you today the Department of Energy's views on Senator Wirth's bill, S. 972, and Senator Glenn's bill, S. 1304. I also would like to provide some preliminary comments on S. 1802, the "Department of Energy Nuclear Facilities Act of 1989," which you and Senator McClure introduced last Thursday. Inasmuch as a major thrust of S. 1802 and S. 1304 deals with bringing DOE facilities into compliance with environmental laws, it would be useful to preface my comments with a review of DOE's present compliance efforts.

Mr. Chairman, I know this Committee is familiar with Admiral Watkins' many efforts to turn the DOE management culture around and to send the strong, clear message that our defense production facilities can be run in an environmentally safe manner. Among these efforts are the Admiral's 10-point plan, the 5-year plan for environmental restoration and waste management, the "Tiger Teams," the new Office of Nuclear Safety, the proposed post of Assistant Secretary for Environmental Restoration and Waste Management, implementation of the fines and penalties provisions of the Price-Anderson Amendments Act, the revolutionary reforms in our award fee system, and the ongoing review of other management and operating contract provisions. These efforts to reshape the DOE management culture are having an immediate, dramatic, and positive impact.

In this context, one of Admiral Watkins' top priorities is to bring all DOE facilities into compliance with Federal and State environmental laws as rapidly as possible. In order to place these compliance issues in context, let me review how DOE got to its present state. Although the Resource Conservation and Recovery Act (RCRA) was enacted by Congress in 1976, judicial determination of its applicability to DOE facilities was not made until 1984. The coverage of all DOE radioactive waste under RCRA was clarified by the Department's "by-product" rule in 1987. Thus, DOE and its employees and contractors have been on notice of the need for compliance in this area for only just over two years. Since the resolution of this issue, however, DOE has entered into 20 compliance agreements with either EPA or the appropriate State environmental authorities, or both, to bring its facilities into compliance with RCRA. Specifically, we have entered into compliance agreements for our facilities at such locations as Savannah River, Hanford, Rocky Flats, Portsmouth Gaseous Diffusion Plant and the Feed Materials Production Center. These compliance agreements identify findings of noncompliance at the facilities and set schedules for taking corrective or cleanup actions. In addition to these compliance agreements, currently we are negotiating 11 RCRA or combined RCRA/CERCLA compliance and cleanup agreements.

While we are making reasonable progress in entering into these compliance agreements, we do have some concerns in this area. Let me share these with you.

First, for the compliance agreements to be truly effective, they must identify and then address all of the environmental problems at a facility. To achieve this objective, DOE employees and contractors should be encouraged to seek out and to disclose this information. We need to make clear to our employees and contractors that prompt, good faith efforts to disclose environmental problems and to move promptly toward compliance with environmental laws are the goals of our new management culture and that these efforts will not subject those acting in good faith to criminal prosecution. These compliance agreements identify findings of noncompliance at the facilities and set schedules for taking corrective or cleanup actions. The agreements do not, however, absolutely preclude prosecution for the underlying environmental violations while they are being corrected. If sanctions for ongoing violations occurring within the contemplation of compliance agreements were suspended, the incentives to disclose violations, enter into compliance agreements dealing with those violations, and fulfill those agreements would be considerably enhanced.

In this regard, I believe the recent Department of Justice (DOJ) letter to DOE and EPA setting forth DOJ's views with regard to the exercise of its prosecutorial discretion in environmental compliance matters goes a long way toward providing our contractors and employees with the proper encouragement to disclose environmental violations. I would note particularly that letter´s emphasis upon the significance of full, prompt disclosure and subsequent efforts to achieve compliance or remediation as bearing upon the exercise of that discretion. Mr. Chairman, we support provisions which would induce individuals to fully and completely identify and correct environmental problems at our facilities, while preserving the option to prosecute individuals for past misdeeds or the failure to disclose or otherwise not act in good faith. People who have, in good faith, identified environmental violations, entered into compliance agreements, and are fulfilling their obligations under those agreements should not live in fear of criminal prosecution for ongoing incidents of noncompliance with environmental laws and regulations.

Second, because we have many complex and difficult environmental problems at our facilities which require significant planning and resources to correct them, we must develop a strategy to address these problems in an orderly and comprehensive manner. The Admiral´s 5-year plan does this. The 5-year plan, developed with broad participation by State and Tribal representatives, affected Federal agencies, and others, addresses environmental requirements in a unified, prioritized and coordinated fashion by examining projected actions and expenditures over a 5-year planning period. It enables full and continued public comment by all interested parties and will be updated on an annual basis. Examining our environmental problems in a unified manner, and on a basis that takes into account national concerns and our obligations to comply with environmental law, is the only effective and efficient way to resolve those problems. Mr. Chairman, I urge that you consider this type of long-range planning so that we may be assured of prompt implementation of this national environmental compliance and cleanup strategy.

II. S. 1802

A. Title VIII

Mr. Chairman, I would like to turn now to title VIII of S. 1802 -- Nuclear Facilities Cleanup Compliance Agreements. Because S. 1802 was just introduced last week, there has been insufficient time for the Administration to review this bill comprehensively and develop a position on it. Accordingly, our comments on S. 1802 represent the preliminary views of DOE only on some of its most important features. In this context, in addition to my general comments above let me briefly list my other specific comments:

(1) As defined in section 2(a), the term "nuclear facility" does not include all DOE facilities that could be covered by compliance agreements or orders.

For example, DOE's Pantex, Kansas City and Pinellas Plants, the Mound Facility, the Nevada Test Site and Sandia National Laboratory are not covered by this definition. This could be corrected by using the definition in section 2 of H.R 1836.

(2) Section 803(b) would require that, if compliance negotiations are not completed within 12 months, an action in U.S. District Court may be instituted to "determine the content of a compliance agreement." First, we basically believe that it is the executive branch's responsibility to negotiate and finalize compliance agreements. The negotiation of these type of agreements properly rests with the affected agencies and should not be delegated to the judiciary. Second, we believe that this provision would delay the resolution of compliance agreements and perhaps even provide incentives for a recalcitrant party to refuse to participate in the negotiation process at all. I do not believe the Federal judiciary is the most efficient or appropriate forum for the negotiation -- or imposition -- of a complex environmental agreement. We would recommend instead that, if the DOE Secretary and the EPA Administrator or appropriate State authority are unable to agree on the terms of a compliance agreement within the specified time,

the Administration should set up a mechanism to resolve the differences subject to the President's direction. In this way, the views of all the parties would be fully and fairly examined, but the incentive would remain for all parties to finalize a compliance agreement on a voluntary, negotiated basis rather than have terms imposed.

B. Title II

This title would apply the Occupational Safety & Health Act of 1970 (OSHA) to the Department's nuclear facilities five years after the date of enactment. It also would require the Secretary, in consultation with the Department of Labor Assistant Secretary, Occupational Safety and Health, to develop a plan to "phase in" OSHA standards at DOE. In developing the plan, the Secretary would provide opportunities for public comment, including holding public hearings.

The Department is not waiting for enactment of legislation to ensure that the safety of our workers is protected. Although as a matter of policy DOE has adopted OSHA standards, along with other national safety and health standards, the key is ensuring that we are in compliance with these standards. Toward this end, Admiral Watkins has formally asked the Ooccupational Safety and Health Administration to participate in some "Tiger Team" assessments of DOE's defense production facilities. Its representatives currently are participating in assessments of the Department's Y-12 Plant in Tennessee, the Mound Plant in Ohio, and the Pantex Plant in Texas. These joint inspections will assist DOE contractors in carrying out their responsibilities to assure that the health and safety of employees will be protected while the Department carries out its national security mission.

C. Title III

Finally, I would like to comment on title III of S. 1802. The epidemiologic provisions in title III are of great interest to Admiral Watkins. Title III would require the Secretary to appoint a panel to evaluate DOE's epidemiologic programs and to make its recommendations to the Secretary. Title III also would require the Secretary to establish an Epidemiologic Data Repository. Until this repository is established, this title would grant access to the Department's epidemiologic raw data under circumstances that are reasonable and designed to protect the confidentiality of personal records.

As you are aware, when the Secretary assumed office last March, he too saw the need for an independent evaluation of this program and guidance on how it should be restructured. Therefore, a special advisory committee was chartered, comprised of individuals who have expertise in such areas as public, environmental, and occupational health, epidemiology, and research standards.

This advisory committee has a broad mandate -- commensurate in scope with that of the panel that would be established under title III -- including studying and making a recommendation on the utility and feasibility of transferring the epidemiologic research function, together with the necessary data, to another entity.

III. S. 972

The essence of S. 972, the "Radiation Research Reorganization Act of 1989," is that it would transfer to the Department of Health & Human Services (HHS) DOE's authority to conduct radioepidemiologic studies. HHS would be required to undertake a comprehensive program to identify the nature and magnitude of the risk to the public and DOE's workforce resulting from DOE nuclear activities. The bill also would establish an advisory panel that would evaluate the HHS program and make specific recommendations to HHS.

Except for the involvement of HHS, and specifically the transfer of responsibility from DOE to HHS, this bill is very much in line with title III of S. 1802 and those administrative actions already directed by Admiral Watkins. In addition to the review by the special advisory committee already discussed in this testimony, the three other major steps in the Admiral's program include the National Academy of Sciences' (NAS) establishing (at DOE's request) a standing committee on radiation epidemiologic research programs to advise DOE on its programs and on data access issues; establishing a comprehensive epidemiologic data repository; and working with NAS to develop interim procedures to allow independent researchers access to DOE's raw data before the repository is operational.

The Department cannot support enactment of S. 972. In transferring DOE's epidemiologic research to HHS now, the bill is simply premature. We believe the better course of action is to rely on the assessment of an independent review, whether conducted under the terms of S. 1802 or by the Secretary's special advisory committee.

There is a commonality of purpose, though clear differences in detail, among title III of S. 1802; S. 972; and title IV of S. 1304. It might be useful to codify the Department's activities in this area, including the evaluation and recommendation functions of the Secretary's advisory committee. This would help to keep our feet to the fire and provide a meaningful assurance to the members of this Committee, as well as to others, that the Department believes its epidemiologic activities are central to protecting public health and safety, as well as our own workforce. We think S. 1802 provides the appropriate treatment of this issue.

IV. S. 1304

This bill, the "DOE Nuclear Safety and Environment Act," is composed of 8 titles whose purposes are to increase the level of environmental and safety oversight and environmental cleanup activities at DOE's nuclear facilities. These titles address a number of different issues. For example, title VI would require EPA, DOE, and each State within which there is a DOE defense nuclear facility to negotiate a cleanup agreement within 18 months of the date of enactment. As the Admiral recently pointed out to this Committee, we agree with the goal of negotiating compliance agreements with EPA and the States and are already doing that now.

On the other hand, title I of S. 1304 is premature. It would expand the jurisdiction of the new Defense Nuclear Facilities Safety Board to six specifically identified DOE facilities. The Board presently has enough to occupy its attention. It would be best to let this Board get its feet on the ground before broadening its charter.

I think it is quite clear by now that the Administration strongly supports Federal facility compliance with environmental statutes. I am personally proud of the Department's initiatives since Admiral Watkins took office. The Department's efforts fit neatly within the Administration's overall efforts to ensure compliance and to clean up environmental problems at Federal facilities.

The Administration believes that further administrative and legislative action may prove to be useful to enhance this effort. I have indicated today several provisions of S. 1802 that would be helpful to the Department in addressing the long-term solution to our environmental problems. S. 1802 hits much closer to the mark than other bills introduced in the Senate. Some of these bills would have been helpful -- perhaps even necessary -- based upon last year's data. I believe that they are now less useful, given Admiral Watkins' initiatives and the current direction of the Department. I and other members of the Administration stand ready to work with you to see that legislation addressing the environmental problems we face at DOE facilities is crafted in a way that aids in solving these problems.

V. Conclusion

Mr. Chairman, as you are well aware, Admiral Watkins has made substantial progress in addressing the massive environmental problems that plague DOE. We are fully dedicated to complying with all environmental laws and to running our defense facilities in an environmentally safe and healthy manner. We appreciate the full and helpful support which we have received from this Committee in this area, as well as in the area of seeking competitive salaries for key Department officials involved with resolving our environmental compliance and cleanup problems. We look forward to your continued counsel and cooperation.

The **Chairman**. Thank you very much, Mr. Wakefield. I am going to interrupt with the witnesses' statements at this point. Senator Metzenbaum has a short opening statement.

STATEMENT OF HON. HOWARD M. METZENBAUM, U.S. SENATOR FROM OHIO

Senator **Metzenbaum**. Thank you very much, Mr. Chairman. I appreciate your courtesy and the cooperation of the witnesses. I have to leave. I will come back because I am very much interested in the hearing.

Four weeks ago Secretary Watkins told this committee why the Nation's nuclear weapons plants are so plagued with problems. He told us, "Poor management has been the root cause of most of the problems I have found."

And yesterday the Associated Press quoted Secretary Watkins in an internal memorandum saying, "The vital national security mission of the department can no longer be carried out under the current management arrangement." I commend him on both those statements. I do not think that anyone on this committee or in the entire Congress disagrees with Secretary Watkins. His testimony at our earlier hearing reaffirmed my profound alarm with the way the weapons program has been managed and mismanaged at all levels.

From the top of OMB to the field offices of DOE, from the corporate headquarters of the contractors to the supervisors on the floor of the weapons facilities, we have found mismanagement. Secretary Watkins also reaffirmed to me the enormity of the task before him and the department. The more we examine the extent of the problems at DOE, the more it becomes clear that the reform and cleanup on the weapons complex is impossible without new legislation.

Apparently I am not the only member of the committee who came to the same conclusion. I am very pleased to see the introduction of S. 1802 by Senators Johnston and McClure since our last hearing. S. 1802 joins a growing list of legislation, including my own bill S. 446, the Price-Anderson Financial Accountability Amendments of 1989, which codify into law administrative changes proposed by Secretary Watkins.

S. 1802 also includes two essential steps for which I have long argued. One, OSHA must play a central role in assuring the safety and health of workers at the weapons plants, and, two, we must provide strong protection for whistleblowers at the weapons plants.

I urge Secretary Watkins to take heed of this legislative stampede. He must accelerate and expand the perestroika that he has started at DOE. As his very next step he should arrest the reported turmoil in the weapons program by withdrawing the nomination of Victor Stelho and moving on to a more qualified and acceptable nominee.

I hope that Mr. Wakefield will update us on the reported findings of the occupational safety and health violations at the Mound facility by the Tiger Team and will shed some light on the current investigation at Fernald.

Mr. Chairman, I also want to point out that very recently, September, the Department of Energy report came out on the indemnification of the Department of Energy's management and current operating contractors, and it is quite clear there in the Inspector General's report that what we have been doing is making findings against contractors and then we have been permitting them to add on the costs of those penalties to the charges which they make to the federal government.

What an absurdity. What an unbelievable kind of situation. You fine somebody through the government processes and then you go back and you pay what that fine was as a part of the contract.

This committee knows I have had legislation for some time trying to press in order to make the contractors more responsible to actually pay themselves when they violate the law, violate the regulations, and this committee has very grudgingly moved about 10 percent of the way.

I would hope that these hearings, the Inspector General's report, the movement that has now been evidenced by the Chairman and the ranking member would cause us to go much further on the whole question of contractor responsibility and contractor liability, and I would hope the Department of Energy would be supportive of our efforts in that direction.

Mr. Chairman, I thank you for your courtesy.

[The prepared statement of Senator Metzenbaum follows:]

Statement of Senator Howard M. Metzenbaum

Energy and Natural Resources Committee Hearing
On the Department of Energy's Operation and Management
of its Atomic Energy Defense Activities
and the Environmental Cleanup of these Facilities

October 31, 1989

Four weeks ago Secretary Watkins told this Committee why the nation's nuclear weapons plants are so plagued with problems. He told us: "Poor management has been the root cause of most of the problems I have found."

And yesterday the Associated Press quoted Secretary Watkins in an internal memorandum saying: "The vital national security mission of the Department can no longer be carried out under the current management arrangement."

I don't think that anyone on this Committee, or in the entire Congress, disagrees with Secretary Watkins. His testimony at our earlier hearing re-affirmed my profound alarm with the way the weapons program has been managed -- and mismanaged -- at all levels: from the top of O.M.B. to the field offices of D.O.E.; from the corporate headquarters of the contractors, to the supervisors on the floor of the weapons facilities.

Secretary Watkins also reaffirmed to me the enormity of the task before him and the Department. The more we examine the extent of the problems at D.O.E. the more it becomes clear that the reform and clean up of the weapons complex is impossible without new legislation.

Apparently I am not the only member of this Committee who came to the same conclusion. I am very pleased to see the introduction of S. 1802 by Senators Johnston and McClure since our last hearing.

S. 1802 joins a growing list of legislation -- including my own bill, S. 446, "The Price-Anderson Financial Accountability Amendments of 1989" -- which codify into law administrative changes proposed by Secretary Watkins. S. 1802 also includes two essential steps for which I have long argued: (1) OSHA must play a central role in assuring the safety and health of workers at the weapons plants, and (2) We must provide strong protection for whistleblowers at the weapons plants.

I urge Secretary Watkins to take heed of this legislative stampede. He must accelerate and expand the "perestroika" that he has started at D.O.E. As his very next step he should arrest the reported turmoil in the weapons program by withdrawing the nomination of Victor Stello and moving on to a more qualified and acceptable nominee.

I hope that Mr. Wakefield will update us on the reported findings of occupational safety and health violations at the Mound facility by the Tiger Team, and will shed some light on the current investigation at Fernald.

I look forward to hearing from today's witnesses.

The **Chairman**. Thank you, Senator Metzenbaum.

Next we will hear from Mr. Richard B. Stewart, Assistant Attorney General.

STATEMENT OF RICHARD B. STEWART, ASSISTANT ATTORNEY GENERAL, LAND AND NATURAL RESOURCES DIVISION, DEPARTMENT OF JUSTICE

Mr. **Stewart**. Thank you, Mr. Chairman. I am pleased to have the opportunity to appear before you today, and I have a written statement which, as you indicated, will be submitted for the record. It discusses several environmental policy and constitutional concerns that the Justice Department has on various provisions of S. 1304 and S. 972.

We have just recently received the newest bill under the committee's consideration, S. 1802, which you and Senator McClure have introduced. It certainly addresses important issues. We are continuing to analyze it and would like to submit written comments on it in the near future. I will confine myself to a few key points in my oral remarks.

The Federal Government has made progress in cleaning up Federal facilities and bringing them into environmental compliances, but a great deal more remains to be done. The Justice Department has attempted to assist this effort by cooperating with the EPA and the Energy Department and other departments to negotiate compliance agreements that are legally sound and enforceable. And in appropriate cases, we do have criminal enforcement capability as well.

S. 1304, the DOE Nuclear Safety Environment Act would make a variety of changes in the regulation management and oversight of DOE nuclear facilities aimed at enhancing safety and encouraging environmental cleanup and compliance. It includes a provision on compliance agreements, section 601, which would apparently require EPA, DOE and the appropriate state to enter a compliance agreement for each defense nuclear facility.

We support this section's objective of facilitating the process of negotiating compliance agreements and subsequent remedial action at DOE nuclear facilities through the use of enforceable agreements between EPA, DOE and, when possible, the affected State.

We appreciate that the focus of the section and the bill as a whole is on taking positive steps to identify and address environmental compliance problems and remedial action requirements.

We believe that any effective and meaningful Federal facility legislation should focus on improving the identification of environmental compliance problems and remedial action requirements.

In addition, however, we believe that effective legislation must also include a process for establishing environmental planning and funding priorities for undertaking remedial action in an orderly manner addressing the worst sites first. S. 1304 does not address this priority setting issue.

We have several specific concerns with section 601 as currently drafted. First, the relation between section 601 compliance agreements, existing agreements and existing law is unclear in part because certain important terms are not defined. This relationship should be clarified to avoid duplicative and inconsistent requirements, to ensure that all important environmental concerns are adequately addressed, and to take advantage of the processes that are already in place under the Superfund law and other environmental statutes.

Secondly, the requirement in 601 that the EPA administrator and the Secretary of Energy negotiate agreements with the states within a deadline of 18 months is problematic. We are concerned that this time limit may give states an inappropriate bargaining advantage to dictate cleanup and funding priorities that must in the end be financed by federal taxpayers and may thus create problems analogous to those posed by H.R. 1056.

In our experience under the Superfund or CERCLA law in the negotiation of interagency agreements, it has sometimes been very difficult to agree at a definition of the State's role that is satisfactory to both the Federal Government and to the State. The State's role in these agreements should be carefully considered and defined to meet only the necessary purposes of the legislation.

Finally, as detailed in my written statement, we have some constitutional concerns with specific provisions of S. 1304 and S. 972. In short, we believe there are constitutional problems with the requirement in S. 1304 that appears to require the executive to execute compliance agreements and then automatically gives them the status of consent decrees and Article III courts.

And we also have concerns with the tenure provisions for members of the Defense Nuclear Facilities Board in S. 1304 because section 102 of that bill would limit the President's power to remove officers of the executive branch.

We are troubled by the reporting provision in S. 1304, section 403(b), and we have some constitutional concerns with the section 11 of S. 972 which would limit the President's discretion in his appointments to the advisory panel on radiological research.

These criticisms notwithstanding, we appreciate the interest of Senators Glenn and Wirth and of the Chairman and Senator McClure and of the committee as a whole in this important issue and would be happy to work with the committee to refine these proposals, to eliminate our constitutional and other concerns and to ensure sound and effective legislation in this area.

I want to stress that the Justice Department, along with the rest of the administration, is committed to ensuring that all federal facilities are cleaned up and that we achieve full environmental compliance. We are committed to working closely with the Congress, with EPA, with the Energy Department and other federal agencies to achieve this goal as soon as possible. Thank you.

[The prepared statement of Mr. Stewart follows:]

Department of Justice

STATEMENT

OF

RICHARD B. STEWART
ASSISTANT ATTORNEY GENERAL
LAND AND NATURAL RESOURCES DIVISION

BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE

CONCERNING

ENVIRONMENTAL, SAFETY, AND HEALTH ASPECTS
OF THE OPERATION OF
DEPARTMENT OF ENERGY NUCLEAR FACILITIES

OCTOBER 31, 1989

Mr. Chairman and Members of the Subcommittee:

Good morning. I am Richard B. Stewart, the Assistant Attorney General in charge of the Justice Department's Land and Natural Resources Division. I-am pleased to have this opportunity to appear before the Committee on behalf of the Department to discuss S. 1304, S. 972, and environmental compliance at DOE nuclear facilities. In addition to commenting on environmental policy matters, I would also like to raise with the Committee several constitutional concerns that the Department of Justice has concerning several discrete provisions of S. 1304 and S. 972.

The Administration is committed to ensuring that all federal facilities reach and maintain full environmental compliance as expeditiously as possible. The Departments of Energy and Defense and the Environmental Protection Agency are the lead agencies in this effort, and you have heard (or will hear today) from representatives of those agencies about the steps they are taking to address environmental problems at federal facilities. The Justice Department is also playing an important role in this effort, in several ways. First, the Department has an active program of civil and criminal enforcement against persons who violate the environmental laws. Our criminal enforcement program, which has grown substantially since its inception in 1983, extends to federal contractors and individual federal employees. In addition to some notable convictions of individual federal employees, the enforcement program has already succeeded in making environmental compliance a major concern in the minds of the federal employees and contractors who are responsible for operations at federal facilities.

Second, we are working closely with the DOE, DOD and EPA as they negotiate and implement compliance agreements under various environmental statutes at federal facilities. My testimony today will focus on these agreements and the provisions of S. 1304 that deal with such agreements. We have just recently received the Committee's new bill, S. 1802, which was introduced on October 26th, and we are continuing to analyze it. We would like to submit written comments on it in the near future. As for the other provisions of S. 1304 and S. 972, the Justice Department defers to the views of the agencies most directly affected: EPA, DOE, and the Department of Health and Human Services.

As the members of this Committee know, federal agencies, notably the Defense and Energy Departments and their contractors, operate facilities that generate hazardous and radioactive wastes. Many of these facilities began operation when information and practices regarding disposal of these wastes were much less sophisticated. Several of DOE's nuclear production plants, for instance, began operation in the late 1940's or early '50's when land disposal of nuclear and hazardous waste was routine, and well before laws governing disposal of this waste were even being considered. The government now faces the difficult and expensive tasks of cleaning up existing contamination and upgrading operating and disposal practices at its facilities.

Congress took an important step towards addressing the cleanup issue in the 1986 amendments to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or "Superfund"). CERCLA section 120 requires federal agencies to clean up major hazardous waste sites. Specifically, it sets out a process whereby federal agencies are required to enter into interagency agreements (known as "IAGs" of "Federal Facility Agreements") with EPA to govern remedial action at federal facilities that are included on the National Priorities List ("NPL") of hazardous waste sites. The IAGs are enforceable by third parties, including States and citizens.

The Justice Department played an active role in helping EPA, DOE and DOD implement the CERCLA IAG process. We assisted in the development of consistent, meaningful language for IAGs between EPA and the Departments of Energy and Defense, and we've been involved in the negotiations on several site-specific IAGs. Site-specific agreements have been completed for three major DOE facilities, and are in process for five others. Progress in negotiating agreements at DOE and DOD facilities has been delayed in some instances, however, by objections from States that want more control over federal facility cleanups. Indeed, at DOD's Rocky Mountain Arsenal we are involved in litigation with the State of Colorado over the proper federal and State roles in the cleanup process. We are also involved in litigation in Pennsylvania over the proper role of the State at a non-NPL Navy facility. Although disputes over the appropriate federal and state roles in the cleanup process can undermine the objectives of the process, we have made significant progress. As of October 1, 1989, EPA has signed over 30 IAGs at federal facilities, and ten more are in the final stages of negotiation.

In addition to undertaking remedial action at federal facilities through the use of CERCLA IAGs, EPA, DOE and DOD are using a similar process for addressing RCRA noncompliance and corrective action at federal facilities. They have issued final RCRA permits or entered into agreements under RCRA -- called Federal Facilities Compliance Agreements ("FFCAs")-- at six DOE facilities, and several more FFCAs are in process. These agreements, like the CERCLA IAGs, are fully enforceable by third parties. As with the IAGs, the Justice Department has played an active role in facilitating the negotiation and execution of these agreements.

In sum, there is much work to be done at federal facilities and, in many cases, much is already being done. However, we concede the necessity for stronger efforts. Where we and the states sometimes disagree is on the means to be used. We believe any legislation aimed at addressing federal facilities should include a process for establishing environmental planning and funding priorities for undertaking remedial action in an orderly manner, addressing the worst sites first.

S. 1304

S. 1304, the "DOE Nuclear Safety and Environment Act," would make a variety of changes in the regulation, management and oversight of DOE nuclear facilities, all aimed at enhancing safety and encouraging environmental cleanup and compliance. It includes a provision on compliance agreements, section 601, which apparently would require EPA, DOE and the appropriate State to enter into a compliance agreement for each defense nuclear facility. The agreement would be required to contain an inventory of "past and current environmental problems at the facility that require cleanup and abatement," a schedule for remediation, and a provision for notice of "releases . . . which violate the agreement or environmental law."

We support this section's objective of facilitating the process of negotiating compliance agreements and subsequent remedial action at DOE nuclear facilities through the use of enforceable agreements between EPA, DOE and, when possible, the affected State. We especially appreciate that the focus of this section -- and the bill as a whole -- is on taking positive steps to identify and address environmental compliance problems and remedial action requirements at federal facilities. We believe any effective and meaningful federal facilities legislation should focus on improving the identification of environmental compliance problems and remedial action requirements at federal facilities. In addition, however, we believe that effective legislation must also include a process for establishing environmental planning and funding priorities for undertaking remedial action in an orderly manner, addressing the worst sites first. That is, of course, the approach embodied in Admiral Watkins' five-year plan for DOE's nuclear facilities.[1]

We have several additional specific concerns with section 601 as currently drafted which in our view must be corrected if the bill is to achieve its intended objectives. First, the relationship between the section 601 compliance agreements, existing agreements and existing law is unclear. One factor contributing to this ambiguity is the absence of definitions or explanations of certain important terms. Section 601(b) refers to "environmental problems" requiring "cleanup" and "abatement," but does not define these terms nor specify who is responsible for determining whether such a problem exists. As a result, the bill provides little guidance on the relationship of these provisions to CERCLA section 120 and the enforcement authorities of other environmental statutes. This relationship should be clarified to avoid duplicative and inconsistent requirements, to ensure that all important environmental concerns are adequately addressed, and to take advantage of the processes that are already in place under CERCLA and RCRA. The relationship with

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[1] We think such an approach will produce better results than the approach adopted in H.R. 1056, the federal facilities bill that was recently passed by the House and has been introduced in modified form in the Senate as S. 1140. H.R. 1056, which proposes to address both non-compliance and cleanup problems by allowing states and citizens to seek penalties for RCRA violations at federal facilities, does not address the need for an overall prioritization system. Rather, the scheduling and budgeting of federal remedies could be left to disparate citizen and state enforcement priorities rather than comprehensive, nationwide federal agency planning. We feel that would be a mistake, especially in a time of limited resources.

CERCLA in particular needs to be resolved, because CERCLA section 120 requires IAGs for NPL sites.

Second, the requirement in section 601(a) that the EPA Administrator and the Secretary of Energy negotiate agreements with the States within 18 months is problematic. We are concerned that this time limit may give the States an unfair bargaining advantage over DOE and EPA. In the CERCLA IAGs, it has sometimes been extremely difficult to arrive at a definition of the State's role that is satisfactory to both the federal government and the State. The State's role in section 601 agreements should therefore be carefully considered and defined to meet only necessary purposes of the legislation. In the CERCLA context, States should have input, but they should not have veto power over federal cleanup decisions.

Third, section 601(d) requires that an agreement under that section "be entered and enforced as a consent decree." To the extent that this section is read to require the Secretary of Energy, the Administrator of the EPA, and State officials to actually enter into a binding legal judgment before a court it creates constitutional difficulties. As to the two federal agencies, they are both contained in the Executive Branch and as such, there could be no "case or controversy" between them to support a federal court's jurisdiction under Article III of the Constitution. In addition, there may be serious federalism concerns with Congress commanding a State to enter into a judicial settlement compromising any claims it may have against the United States. Lastly, there may be constitutional difficulties with Congress commanding the Executive Branch to settle or compromise particular claims it may assert against state entities.

To the extent the provision is read to directly clothe a private agreement with the attributes of a judicially entered consent decree by congressional action alone, it involves an incursion into the Article III powers of the federal courts. Under Article III of the Constitution, the "judicial power of the United States" is vested in the Supreme Court and such inferior federal courts as Congress shall create. A congressional enactment purporting to clothe a private agreement with all the attributes of a judgment entered by an Article III court directly encroaches on the judicial power of the federal courts. See Commodity Futures Trading Commission v. Schor, 478 U.S. 833 (1986); Northern Pipeline Construction Co. v. Marathon Pipe Line Co., 458 U.S. 50, 76-78 (1982) (plurality opinion). We suggest that this provision be deleted from the bill.[2/]

Let me turn briefly to several constitutional concerns which the Department has regarding provisions in other titles of the bill. Title I of the bill deals with the oversight authority of the Defense Nuclear Facilities Safety Board (DNFSB). Section 101 of that title amends § 318 of the Atomic Energy Act of 1954, 42

[2/] CERCLA avoids this constitutional problem and uses a different approach to ensure the enforceability of IAGs. CERCLA section 310 provides that "any person" may commence a civil action against a person alleged to be in violation of an IAG.

U.S.C. § 2286g, to expand the definition of "Department of Defense nuclear facilities" subject to DNFSB oversight activities. Section 102 of title I of the bill is entitled "Protection of Members of Board," and amends § 311(b) of the Atomic Energy Act of 1954, 42 U.S.C. § 2286(a) by adding a subsection (5) which would provide:

> "(5) Any member of the Board may be removed by the President only for inefficiency, neglect of duty, or malfeasance in office."

The Defense Nuclear Facilities Safety Board is denominated "an independent establishment within the Executive Branch." 42 U.S.C. § 2286(a). Its five members are appointed by the President with the advice and consent of the Senate. The Board's duties include advising the Secretary of Energy concerning the implementation of standards relating to the design, construction, and decommissioning of defense nuclear facilities. 42 U.S.C. § 2286a(1). Under 42 U.S.C. § 2286a(2)(A) the Board enjoys broad authority to "investigate any event or practice at a Department of Energy defense nuclear facility which the Board determines has adversely affected, or may adversely affect, public health and safety." The Board is also specifically given the power to hold hearings, issue subpoenas, and assign "resident inspectors" at Department of Energy defense nuclear facilities. 42 U.S.C. § 2286b(a)-(j). In certain circumstances, the Board makes recommendations directly to the President. 42 U.S.C. § 2286d(g)(2).

It is clear that the functions of the Board are purely executive in nature. The Board advises both the Secretary of Energy and, in certain cases, the President, on environmental and safety issues concerning the construction, maintenance, and closing of defense oriented nuclear facilities. In addition, the Board exercises significant investigatory powers. See Bowsher v. Synar, 478 U.S. 734, 732-733 (1986); Morrison v. Olson, 108 S. Ct. 2597, 2619 (1988). The members of the Board are clearly principal officers of the United States, appointed by the President with advice and consent of the Senate. See Buckley v. Valeo, 424 U.S. 1, 132 (1976). The Board has no adjudicatory functions which might be said to require "freedom from Executive interference," see Wiener v. United States, 357 U.S. 349, 353 (1958), nor is it a "quasi-legislative or quasi-judicial agency" such as was at issue in Humphrey's Executor, 295 U.S. 602, 630 (1935). Given that the Board is composed of principal officers of the United States, performing executive functions in an ongoing manner, it seems to us clear that its members must be subject to removal at will by the President or one of his subordinates who serve at his pleasure. See Myers v. United States, 272 U.S. 52, 134 (1926); Morrison, supra, at 2618 ("Myers was undoubtedly correct in its holding, and in its broader suggestion that there are some 'purely executive' officials who must be removable by the President at will if he is to be able to accomplish his constitutional role.") (footnote omitted).

This conclusion is consistent with, and indeed supported by, the Court's recent decision in Morrison v. Olson, supra. The Morrison Court reaffirmed the principle that inquiry into the constitutionality of restrictions on the President's power to remove executive officers is designed "to ensure that Congress does not interfere with the President's exercise of the 'executive power' and his constitutionally appointed duty to 'take care that the laws be faithfully executed' under Article II." Id. at 2619. Accordingly, the Court held that the constitutionality of removal restrictions turns upon whether they "impede the President's ability to perform his constitutional duty," and stated that the functions of the officer whose removablility is limited must be analyzed in that light. Id. at 2619.

In upholding a "for cause" removal provision for the independent counsel, the Court relied heavily on the fact that "the independent counsel is an inferior officer under the Appointments Clause, with limited jurisdiction and tenure and lacking policymaking or significant administrative authority." Id. A comparison of the status and functions of the independent counsel, analyzed in Morrison, and the status and functions of the members of the Defense Nuclear Facilities Safety Board, illustrates why the removal provision contained in section 102 of the bill is of dubious constitutionality.

First, as noted above, the Board members appointed by the President with the advice and consent of the Senate, would not be inferior officers. U.S. Const., art. II, sec. 2, cl. 2. Such individuals, as principal officers of the United States, have traditionally been viewed as being at the heart of the corps of officers whom the President must have unfettered discretion to supervise if he is to execute the law in a coherent and unified fashion. See Myers, supra, at 133-135. Second, Board members do not have "limited jurisdiction and tenure," as did the independent counsel at issue in Morrison. Board members serve for terms of five years. 42 U.S.C. § 2286(d)(1). Third, unlike the independent counsel, who is generally bound to follow prosecutorial guidelines established by the Department of Justice, see 28 U.S.C. § 594(f), the Board members enjoy a significant measure of discretion in the exercise of their advisory, policymaking, and investigatory functions. Finally, under 42 U.S.C. § 2286b(d), Board members may have access to classified information. The President's power as Commander in Chief of the Armed Forces to control officers with access to such information thus heightens concern over any insulation of Board members from the President's control. See Department of the Navy v. Egan, 108 S. Ct. 818, 824 (1988). Because the removal restrictions contained in section 102 pose a serious constitutional problem, we believe they should be deleted from the bill.

The Department is also concerned with the possible constitutional difficulties which are raised by two reporting provisions contained in the bill. Title IV of the bill is entitled the "Radiation Research Board Act," and establishes an advisory board consisting of eight members appointed by the Secretary of Health and Human Services, one member appointed by the Secretary of Energy, and two members appointed by the Secretary of Labor. Subsection 403(b)(2) requires the Board to review proposals submitted by the Secretary of Energy and make recommendations in writing to the Secretary if the Board concludes that the proposals should be modified or not funded. Subsection (3) provides:

> "(3) Annual Reports by Secretary.--The Secretary of Energy shall annually report to the Congress concerning the implementation of the recommendations of the Board. Such reports shall include specific reasons for each decision by the Secretary not to implement a recommendation made by the Board."

This requirement of disclosure is designed to reveal opposing views with respect to the decisions at issue and could thus chill the deliberative process and creates public divisions within the Executive Branch. Accordingly, this provision undermines the President's authority, as head of a unitary executive branch, to control the internal formulation of policy and to coordinate the dissemination of his subordinates' views. See Myers v. United States, supra, at 134. We recommend that the provision be deleted.

The second reporting provision which concerns us is contained in Title VI of the bill. Section 601(c)(ii) requires the Secretary of Energy to supply the Congress with a statement of explanation in the event of a failure to achieve agreement on a Defense Nuclear Facility Cleanup Compliance Agreement as provided in subsections 601(a) and (b). This section also requires the Secretary to include in his report the State's explanation for failure to reach agreement if the State requests the Secretary to do so. In our view, this provision is constitutionally problematic because it empowers an individual outside the Executive Branch to force an officer in the Executive Branch to communicate with Congress. See *Myers*, *supra*. This provision should be deleted from the bill or modified.

S. 972

Turning now to S. 972, we believe that one provision of the bill raises a significant constitutional concern. The bill generally works a transfer of the authority and resources for undertaking research and studies concerning the effects of radiation exposure from the Secretary of Energy to the Secretary of Health and Human Services. See sec. 4. Section 11 of the bill creates an advisory panel denominated the "Advisory Panel on Radiation Research" to advise the Secretary of Health and Human Services concerning these new responsibilities. The Panel is to be composed of nine members appointed by the President with the advice and consent of the Senate. Subsection 11(a)(2) provides in pertinent part:

> At least 5 of the 9 members shall be from outside the Federal service. Among the 9 members of the panel, there shall be at least one representative of--
>
> (A) organized labor unions active at the Department of Energy's nuclear facilities;

> (B) the Secretary of Energy
>
> (C) public interest groups concerned about the health effects of radiation; and
>
> (D) State public health departments and agencies of States having a Department of Energy nuclear facility in their territory."

In our view, this provision impermissibly interferes with the President's authority under the Appointments Clause of the Constitution. The Appointments Clause provides that the President "shall nominate, and by and with the Advice and Consent of the Senate, shall appoint Ambassadors, other public Ministers and Consuls, Judges of the Supreme Court, and all other Officers of the United States, whose Appointments are not herein otherwise provided for." U.S. Const., art. II, sec. 2. The clause provides for a clear division of roles in the selection of principal officers of the United States, the President is given the sole power of nomination, and the Senate is given the power to concur in or reject the President's selection. See The Federalist, No. 76, pp. 456-457 (C. Rossiter ed. 1961 (A. Hamilton) ("In the act of nomination, [the President's] judgment alone would be exercised; and as it would be his sole duty to point out the man who, with the approbation of the Senate, should fill an office, his responsibility would be as complete as if he were to make the final appointment."); 3 J. Story, Commentaries on the Constitution, § 1525 (1833) ("The president is to nominate, and thereby has the sole power to select for office, but his nomination cannot confer office, unless approved by a majority of the Senate.").

In Public Citizen v. United States Department of Justice, 109 S. Ct. 2558 (1989), the Supreme Court held that the disclosure and open meeting requirements of the Federal Advisory Committee Act, 5 U.S.C. app. § 1, et seq., did not apply to a committee consulted by the President in exercising his power to nominate under the Appointments Clause. Decisive in construing the statute to avoid this result were the "formidable constitutional difficulties" presented by a reading of the statute to apply to these consultations thus burdening the President's nomination power under the Appointments Clause. Id. at 2572. Three Members of the Court concurred in the judgment in Public Citizen, indicating that in their view the statute did apply to the President's consultations during the nomination process, but that such "direct and real interference with the President's exclusive responsibility to nominate" was unconstitutional. Id. at 2584 (Kennedy J., joined by Rehnquist, C.J., and O'Connnor, J., concurring in the judgment). In our view, section 11(a)(2) of S. 972, by purporting to dictate whom the President must consider while exercising his nomination power, works an even deeper intrusion into his power under the Appointments Clause than the disclosure provisions at issue in Public Citizen. Because these portions of section 11(a)(2) of the bill unconstitutionally inject the Congress into the nomination process in violation of the Appointments Clause, we urge that they be deleted from the bill. If the bill were presented to the President in its present form, we would recommend disapproval.

These criticisms notwithstanding, we appreciate the interest of Senators Glenn and Wirth and this Committee in this important issue and we would be happy to work with the Committee to refine these bills to eliminate any constitutional concerns to ensure constitutionally sound and effective legislation in this area. We are committed to working closely with the Congress, EPA, DOE, and the other federal agencies to ensure that the federal government reaches and maintains its goal of full environmental compliance at all federal facilities as expeditiously as possible. There has been significant progress towards this goal in the last few years, but much remains to be done.

I would be pleased to answer any questions you might have.

The CHAIRMAN. Thank you very much, Mr. Stewart.

Now we will hear from Christian Holmes, who is Deputy Assistant Administrator of the Office of Solid Waste Emergency Response of EPA.

STATEMENT OF CHRISTIAN HOLMES, PRINCIPAL DEPUTY ASSISTANT ADMINISTRATOR, OFFICE OF SOLID WASTE EMERGENCY RESPONSE, ENVIRONMENTAL PROTECTION AGENCY, ACCOMPANIED BY CHRISTOPHER GRUNDLER, DIRECTOR, FEDERAL FACILITIES HAZARDOUS WASTE COMPLIANCE OFFICE

Mr. HOLMES. Thank you, Mr. Chairman. I, too, have a prepared statement which, with your permission, I would like to have inserted in the record.

I would like to make some brief summary comments regarding my statement.

The stress you placed on responsible solutions is one that we, too, of course, are trying to achieve, and I think it might be helpful for me to take you through the regulatory and legal framework in which we are operating on a very brief basis.

The problem, as you point out, is huge. Of the 17 facilities that are in some 12 States, almost all of them have some violation, but fortunately in all of those facilities we either have a cleanup or compliance agreements done or underway.

The laws that we operate in are really—come in a fourfold framework. On the one hand we have the Resource Conservation and Recovery Act, which is extremely prescriptive and extremely protective. That law basically requires us to operate on a national basis so that we treat private and public facilities alike. It also requires us that when we find a violation, that we issue a notice of noncompliance. We are given 120 days to try to work it out with the potential violator and if not, we have to enter into a Federal facilities compliance agreement.

That agreement lays out a plan of action. That agreement is also legally binding in court.

On top of the that, the Resource Conservation and Recovery Act, RCRA, also sets in the law specific deadlines by which permits have to be received. For example, in 1988, we had to have permits on land disposal, in 1989 permits on incinerators, 1992 permits on storage, and then on top of that the law specifically sets out a requirement to come up with standards for hazardous waste that can be omitted, and we have to come up with those standards over a specific scheduled period of time.

Complementing that is the Comprehensive Environment Response Compensation and Liability Act, which is the predecessor law to the Superfund Act. That act requires us that when a federal facility or any facility makes it to the so-called national priorities list, we have but no choice to immediately or almost immediately within 6 months to enter into a feasibility study, and after the feasibility study is completed, we have 15 months and then we have to enter into some sort of cleanup action.

The law through section 120 of this law specifically lays out requirements for entering into interagency agreements between the Federal facility that is involved with the site, EPA, and the States.

So, it brings the states most certainly into the process. In fact, both laws require us to adhere to state law when appropriate. So, you have got RCRA, you have got CERCLA, and then on top of that you have state laws, which is kind of the third leg of the table here, and then you have something called ARA's, which is an acronym for applicable and relevant and appropriate standards. And in the Superfund law that basically says look. If another law is appropriate to the cleanup, you have got to bring that other law into the process.

So, for example, in cleanups, another law might be the Safe Drinking Water Act which sets standards for ground water. So, all of these come together, and they basically dictate to us very carefully how we are going to clean up and how we are going to comply.

In terms of your bills, we have had a chance to look at 1304. We just got your bill, as you know, last week. Although my comments almost generically apply to both bills because what we are concerned with is the compliance agreements and the way in which we handle mixed waste, in terms of the compliance agreement we are not quite sure whether the bills add something to what is already a complex and protective process, and we are concerned, frankly, that the states where we really brought them along in the process not lose their momentum by adding something new to the process, but we most certainly will be looking at both bills carefully.

In terms of mixed waste, the way in which we operate right now is that a mixed waste is a combination of a hazardous constituent that we are responsible for, and it is a combination of a radiological constituent. We regulate the hazardous constituent and operate under authorities through the Atomic Energy Act. The Department of Energy regulates the radiological constituent.

We are concerned that in both bills that the present relationship is maintained wherein we have this division of labor.

The second element, particularly in the Glenn bill, is a provision that changes the definition of solid waste, and it changes the definition so that it would exclude in effect hazardous waste being regulated by us when they would go into a repository.

The CHAIRMAN. Say again, please.

Mr. HOLMES. The Johnston bill would exclude hazardous waste from the application of RCRA. So, those are two principal concerns that we have.

All in all, we are doing our best, and we really appreciate the legislation that you are offering, and we are taking a hard look at it. Thank you.

[The prepared statement of Mr. Holmes follows:]

STATEMENT OF
CHRISTIAN HOLMES
PRINCIPAL DEPUTY ASSISTANT ADMINISTRATOR
OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE
U. S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
COMMITTEE ON ENERGY AND NATURAL RESOURCES
U.S. SENATE

October 31, 1989

Good morning, Mr. Chairman and Members of the Subcommittee. Thank you for the opportunity to be here today to discuss the environmental compliance issues at the Department of Energy (DOE) nuclear weapons production complex. With me today are Christopher Grundler, Director of the Federal Facilities Hazardous Waste Compliance Office; and Lisa Friedman, Associate General Counsel.

Today I will provide an overview of EPA's activities with regard to implementation of the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund), and describe some of the Agency's future goals for Federal facility compliance. I will also discuss EPA's ideas on establishing priorities for cleanup at the DOE defense facilities. An area I will particularly emphasize is the approach that EPA has developed for the cleanup of these facilities, which involves the development of comprehensive three-party interagency agreements (IAGs) at specific DOE facilities. I will also provide some background on the current dual regulatory framework of mixed waste. I then will provide comments on S. 1304.

I. OVERVIEW

Through enactment of RCRA and CERCLA, Congress empowered EPA to manage hazardous wastes and to remedy the environmental problems caused by improper past management of these wastes and other hazardous substances. To achieve these goals in a uniform manner throughout the country, it is clear that Congress intended that its mandate for action in waste management include those facilities owned and operated by the Federal government

By the express statutory language of RCRA Section 6001, Federal facilities are subject to the provisions of RCRA and its implementing requirements. Moreover, Executive Order 12088 assigns responsibilities to administrators of executive agencies for (1) the prevention, control and abatement of pollution, and (2) assurance that funds sufficient to attain "compliance with standards" are requested. All active Federal treatment, storage and disposal (TSD) facilities handling hazardous waste must have RCRA permits. In addition, Federal TSDs must address any releases of hazardous waste to the environment.

The Superfund Amendments and Reauthorization Act of 1986 (SARA) makes it clear that Superfund applies to Federal agencies, both procedurally and substantively. The specific requirements for Federal agencies are found in Section 120 entitled "Federal Facilities." Section 120 sets forth a process to ensure that

Federal agencies assess and cleanup their hazardous waste sites within specified time frames. Section 120 also requires Federal agencies to enter into an Interagency Agreement for all facilities on the Superfund National Priorities List (NPL) with EPA for the expeditious completion of all necessary remedial actions at a Federal facility. This CERCLA Section 120 process provides for EPA and state oversight as well as the opportunity for public involvement.

It is imperative that every effort be made to ensure that Federal facilities achieve and maintain a high rate of compliance with such environmental requirements. And it is important to EPA's compliance and enforcement efforts directed toward non-Federal entities that EPA demonstrate its resolve to enforce hazardous waste requirements at Federal facilities with the same vigor it uses at private facilities.

Because of the nature of the problems at Federal facilities, a major focus in EPA over the past two years has been compliance by DOE with the RCRA and Superfund statutes. This is particularly true of the nuclear weapons complex, which is made up of seventeen major facilities. Essentially all of these facilities have, or will have, compliance or cleanup issues dealing with solid, hazardous or radioactive wastes. Indeed, the majority of environmental problems and associated future expenditures at DOE's nuclear weapons facilities are related to solid, hazardous or radioactive waste issues.

I would like to turn next to the progress that has been made on developing interagency agreements with DOE. This discussion will include the identification of cleanups which can begin in the near-term. I will also outline some of EPA's concerns and considerations on establishing priorities for cleanup at the DOE defense facilities.

II. INTERAGENCY AGREEMENTS

Section 120 of the Superfund law requires that Federal agencies which have NPL sites enter into interagency agreements (IAGs) with EPA to effect the cleanup of those sites. The Agency for Toxic Substances and Disease Registry (ATSDR), an agency of the Public Health Service with public health responsibilities mandated by CERCLA and RCRA, also has an important role in this area. ATSDR is developing agreements with these agencies to cover ATSDR's responsibilities for health assessments, pilot studies of health effects, full-scale epidemiologic or other health studies, registries of exposed persons, health surveillance programs, health consultations, emergency response activities and development of toxicological profiles.

With regard to EPA concerns, Federal facilities with RCRA permits must conduct corrective actions for on-site solid waste management units which have releases to the environment. Most of the facilities making up the DOE's nuclear weapons complex are under the jurisdiction of both RCRA and Superfund. Also, a number of state environmental statutes or regulations may be applicable to DOE facilities. Depending on site-specific circumstances at each of these facilities, cleanup can be required either through a RCRA Permit (with a corrective action plan) or a RCRA corrective action order addressing hazardous waste releases, or under Superfund as specified through a Section 120 IAG.

The general approach EPA is taking for cleanup of the major DOE facilities is the development, in conjunction with the appropriate states, of three-party (EPA, DOE, the state) Superfund IAGs at each facility. This approach has the following advantages:

- RCRA, Superfund, and other requirements can be addressed in one comprehensive document, leading to an overall compliance and cleanup program.
- It allows for the early identification and implementation of cleanup actions which can be started in the near term, while long-term planning and engineering work proceeds, thereby reducing immediate threats and preventing problems from getting worse and more expensive to remedy.
- The full range of hazardous substances, both

chemical and radioactive, can be dealt with in one document.

- The document, once agreed to by all parties, is legally binding and enforceable in Federal District Court by states and citizens.

In order to facilitate the development of three-party IAGs, the EPA, DOE, and the Department of Defense (DoD) developed model language for key sections of these IAGs. The EPA/DOE/DoD model language resolved significant policy issues including enforceability, resolution of disputes, stipulated penalties, review process for the remedial investigation/feasibility study, remedial design and remedial action, funding and jurisdiction. individual state concerns are negotiated on a site-specific basis.

Key features of the model agreement include the following:

- A strong enforceability provision for state and citizen enforcement of the agreement.
- A dispute resolution process which provides a streamlined mechanism to resolve disputes, with the EPA Administrator making the final decision.
- EPA assessment of stipulated penalties in the event of a failure to comply with a final resolution of a dispute, failure to meet certain critical deadlines, or failure to fulfill a term or condition of the agreement associated with a

remedial action.

- A streamlined and well defined relationship between EPA, and DOE or DoD for the remedial investigation/feasibility study, remedy selection, and remedy implementation.
- A funding clause that describes actions DOE or DoD will take to meet their obligations under the agreement.
- A mechanism by which the parties can develop a comprehensive plan for action which satisfies the requirements of both RCRA and CERCLA and addresses overlap of authorities and minimizes duplication of efforts.

The model language is being used by EPA and DOE, or DoD for National Priorities List sites where CERCLA is selected as a lead cleanup authority. The language sets forth the relative roles and responsibilities of the Federal agencies with respect to one another, and with respect to the cleanup of CERCLA sites.

Although the model language does not specifically deal with the state's role in the agreement, EPA recognizes the importance of state involvement at DOE and DoD Superfund sites in site-specific negotiations. The state's interests, and references within the agreement to these interests, are being built into the site-specific agreements within the context of these negotiations.

Since development of the model agreement language, the EPA, the other Federal agencies and the states have been very active in development of specific agreements at Federal facilities. Over 30 comprehensive cleanup agreements have been reached at major facilities, with another 10 agreements in the final stages of negotiation. During the development of these agreements, the parties have identified or are identifying appropriate cleanup actions which can be started immediately, or in the near future. What follows is a brief summary of ongoing actions at several major DOE facilities. Some examples of site-specific interim actions are described below. Each agreement, consent order, or permit discussed below is a legally binding document enforceable in Federal District Court by the state or a citizen.

o Lawrence Livermore National Laboratory (LLNL) - Superfund lAG signed by EPA, DOE, and the State of California on November 2, 1988. Comprehensive agreement covering all phases of cleanup, with work to be overseen by EPA and the State. Includes both CERCLA and RCRA obligations.

Interim Actions - LLNL has begun a pilot study to pump and treat its main plume of contamination using a ultra-violet light/hydrogen peroxide treatment facility to break down the contaminated groundwater and then discharge the product into recharge ponds.

- Monticello Properties - Superfund IAG signed by EPA, DOE, and the State of Utah on December 16, 1988. Comprehensive agreement covering all phases of cleanup, with work to be overseen by EPA and the State.
- Idaho National Engineering Laboratory - RCRA 3008(h) Consent Order for corrective action signed by EPA and DOE on July 10, 1987. Consent Order covers all hazardous waste and hazardous constituent releases at the facility. Superfund 1AG, covering radioactive releases at the facility, scheduled for completion this year.

  Interim Actions-Installation of an alternate water supply.
- Nevada Test Site - This facility is located in Mercury, Nevada, and is the primary nuclear weapons testing location for the Department of Energy. This facility is not currently listed on the National Priorities List, but is being evaluated for possible inclusion.
- Feed Materials Production Center (Fernald) - Federal Facility Compliance Agreement (FFCA) signed by EPA and DOE on July 19, 1986. Agreement modified on June 30, 1988 to include enforceability clause. Agreement covers both Superfund and RCRA, as well as other environmental laws. Consent decree filed on December 2, 1988, resolving litigation between Ohio and DOE,

requires DOE to continue to comply with FFCA between EPA and DOE.

- Hanford - Agreement reached February 27, 1989 between EPA, DOE and State of Washington to execute a comprehensive cleanup and compliance agreement to address this very complex site. The Agreement covers Superfund cleanup, RCRA permitting, and RCRA closures.
- Mound Plant Ongoing negotiations between EPA, DOE, and the State of Ohio on a Superfund IAG.

  Interim Actions - Stabilization of an off-site source of plutonium contamination.
- Rocky Flats - Federal Facility Compliance Agreement between EPA, DOE and the State of Colorado signed on July 31, 1986, covering both RCRA and CERCLA obligations. A Federal Facility Compliance Agreement between EPA, DOE and the State was also signed in September of 1989 addressing land disposal restriction violations. The State has issued a draft RCRA permit which covers a portion of the facility. The permit contains closure and corrective action requirements at the RCRA units. In addition, EPA, DOE and the State are in the final stages of negotiating a comprehensive Superfund IAG.

  Interim Actions - Measure to control the source of contamination at a surface impoundment.
- Oak Ridge - A final RCRA Permit is in place which

includes corrective action provisions covering all hazardous waste releases at the facility. In addition, EPA is in the final stages of negotiating a Superfund IAG with DOE and the State of Tennessee.

- Savannah River Plant - EPA has issued a final RCRA permit, which includes corrective action provisions covering all hazardous waste releases at the facility. In addition, EPA is in the final stage of negotiating a Superfund IAG with DOE and the State of South Carolina. Interim Actions - Closure of surface impoundments under RCRA; control of contaminated groundwater.
- Pantex - EPA and DOE are negotiating an agreement which will require DOE to investigate all hazardous waste releases at the facility, located in Texas.
- Kansas City Plant - This DOE Defense Facility, located in Missouri, does not handle nuclear material and has not scored high enough for inclusion on the NPL. Instead, the cleanup will primarily be regulated under RCRA. EPA and DOE have negotiated and signed a RCRA 3008(h) corrective action order to address hazardous waste releases at the facility. The order covers closure of lagoons as well as the operation of a ground water treatment plant. Discharges from the plant, which DOE has operated for some time, are regulated by a Clean Water Act permit.

Interim Action - Installation of additional pumping wells to remove hazardous wastes and constituents from the groundwater; maximize operation of existing wells to remove hazardous constituents.

- Los Alamos National Lab - This is a non-NPL facility located in New Mexico, and the cleanup will be primarily regulated under the RCRA program. Corrective action to remediate releases of hazardous waste at the facility will be addressed through the RCRA permit.
- Sandia National Lab - This is a non-NPL facility located in New Mexico, and the cleanup will be primarily regulated under the RCRA program. Corrective action to remediate releases of hazardous waste at the facility will be addressed through the RCRA permit.

III. ESTABLISHING PRIORITIES FOR CLEANUP AT DOE FACILITIES

The priorities for cleanup at Federal facilities are currently driven by deadlines established by statute. As detailed in CERCLA Section 120(e), a Federal facility must commence a Remedial Investigation/Feasibility Study within six months of listing on the National Priorities List. Physical onsite remedial action must commence within 15 months after the completion of the investigation and study. Schedules for the implementation of RCRA corrective action are driven by the statutory deadlines for permit issuance. The 1984 Hazardous and

Solid Waste Amendments required EPA to issue all land disposal permits by November 8, 1988, all incinerator permits by November 8, 1989 and all storage permits by November 8, 1992, for facilities that had interim status in November, 1984.

As EPA develops these comprehensive IAGs with DOE and the states, priorities are established within the agreements based on the relative threats to human health and the environment. Areas of contamination determined to represent higher threats are investigated or addressed by an expedited cleanup response first, while areas which do not represent as great a threat to the environment are scheduled for investigation later.

Federal agencies face potentially enormous cleanup costs. However, these costs will not be realized immediately as DOE and other Federal agencies are still predominantly in the problem identification phase. As these studies conclude and cleanup plans are proposed and selected, potentially expensive construction activities must begin within 15 months.

Planning for the resources to clean up past hazardous waste problems at Federal facilities will require an orderly process for determining priorities. Development of this process must start now. Along with assessing the risk to human health and the environment, the process must try to reconcile the statutory requirements for action provided in RCRA and CERCLA with the constraints of the Federal budget process. It must accommodate the interest and concerns of affected states, Federal agencies as well as the public. The task can not be taken lightly and represents a significant challenge. It will require the attention of the states, the coordinated effort of EPA and other Federal agencies and the help of Congress to develop an approach which realistically addresses these concerns. EPA looks forward to working with DOE, the Congress, and others to solve this national problem.

IV. RCRA COMPLIANCE STATUS

Federal facility compliance with environmental laws and regulations is an issue of vital concern to the Agency. Statutory language makes it clear that Federal facilities must comply both procedurally and substantively with RCRA in the same manner as non-Federal entities. EPA has various enforcement tools to deal with non-compliance with RCRA at Federal facilities. The states also have important roles under both the RCRA and CERCLA program. Generally, states take the lead role in implementing the programs. Close coordination by the Agency with the states is essential on all compliance and cleanup enforcement actions.

When EPA takes the lead in addressing non-compliance with RCRA requirements (for example, groundwater monitoring requirements or drum labelling requirements), EPA will issue the Federal facility a Notice of Noncompliance. EPA will then negotiate a Federal Facility Compliance Agreement to resolve the compliance issues. For compliance issues at Government-Owned Contractor Operated Facilities in which the contractor has the operational responsibility for hazardous waste management activities, EPA may exercise its authority to issue a Section 3008(a) Order and assess civil penalties against the contractor. States have their own enforcement authorities including the issuance of orders against Federal facilities to ensure compliance with hazardous waste requirements.

As of October 21, 1989, 15 facilities, or 88% of DOE Defense Production facilities, are not in compliance with RCRA. Nine facilities, or 53% of the facilities, are what EPA classifies as High Priority Violators (HPV). Eight out of nine DOE HPVs are being addressed through either a RCRA Federal Facility Compliance Agreement with EPA, RCRA corrective action orders with EPA, or through state orders. EPA has taken the lead at six facilities. Two of these actions were taken against the contract operator.

V. MIXED WASTE

Since 1986, DOE, EPA and the Nuclear Regulatory Commission (NRC) have recognized that regulation of mixed waste falls under both RCRA and the Atomic Energy Act (AEA), in that the radioactive component of the waste is regulated by either DOE or NRC under the AEA, and the hazardous waste component is regulated under RCRA. In general, NRC regulates commercial facilities and most federal facilities other than DOE. DOE regulates itself under the AEA.

On July 3, 1986 EPA published a Federal Register notice which informed States that they must have authority to regulate the hazardous component of mixed waste in order to obtain or maintain authority to operate a hazardous waste program pursuant to RCRA.

Although RCRA applicability to the hazardous waste component was clearly established by the notice, uncertainty on what constituted by-product material persisted. The AEA does not clearly define by-product material; therefore, the scope of what constituted by-product material in a given waste stream was unclear. DOE published a final interpretative rule in the Federal Register defining a by-product material on May 1, 1987. The notice stated that the term by-product material refers only to the radioactive component of a nuclear waste. The hazardous components are not by-product materials, and therefore are subject to RCRA regulation.

Together, EPA's July 3, 1986 notice, and DOE's May 1 1987 notice, provide the current dual regulatory framework for mixed radioactive and hazardous waste.

Dual regulation of mixed waste involves not only EPA, DOE and NRC, but also state authorities, since RCRA is implemented primarily by individual states. Under the state authorization scheme of RCRA, state RCRA programs must be equivalent to, but may be more stringent, or broader in scope, than the Federal RCRA program. Authorized States implement their programs in lieu of the Federal program. At this time, nine States are authorized to regulate mixed waste: Ohio, Washington, Colorado, South Carolina, Georgia, Kentucky, Utah, Minnesota, and Tennessee. State hazardous waste regulations apply to mixed waste facilities in these States. There are eleven unauthorized states and territories (California, Idaho, Wyoming, Iowa, Alaska, the U.S. Virgin Islands, Connecticut, American Samoa, Marianna Islands, Guam and Hawaii), where EPA administers the RCRA hazardous waste program, bringing the total to 20 States and territories where mixed wastes are subject to federal RCRA hazardous waste regulations or authorized State programs under RCRA. Most states with major DOE nuclear defense facilities have mixed waste authority. We anticipate authorizing the remaining states in the next few months.

An additional 36 states that have authorization for the "base" hazardous waste program have not amended their programs to include authorization to regulate mixed wastes.

Fifteen of the 36 base-authorized States have either draft or final mixed waste authorization applications pending. We will review these pending applications expeditiously and anticipate decisions on many of these pending applications within the next six months.

VI. COMMENTS ON S. 1304

We have a number of concerns with S. 1304 as drafted. First, we have a significant concern regarding Title VI on Federal facility compliance agreements. While we support the objective of encouraging three-party settlements over DOE compliance and cleanup issues, we find the provision unnecessary, and in some respects, problematic. First, as the foregoing indicates, EPA, DOE, and the states are already entering into enforceable, three-party agreements under existing authorities for the cleanup of the major DOE facilities. Second, in enforcing operational requirements of environmental laws, the states generally take the lead under state law, and it is not clear how this provision affects the exercise of those independent state authorities. Where EPA takes the lead, EPA already negotiates enforceable FFCAs or consent orders under existing federal authorities. In any event, it would not be efficient to require, in every instance of noncompliance, the negotiation of a three-party agreement, as there are existing federal or state authorities which are currently being used.

With respect to mixed wastes, we have described how EPA and the States are working within the dual regulatory framework established for DOE mixed wastes. We are concerned that the language in Title III of S. 1304 can be interpreted to mean that EPA has the authority under RCRA to regulate both the hazardous and radioactive components of mixed waste. This interpretation would affect the present division of jurisdiction over the regulation and management of mixed waste by NRC, NRC licenses, EPA and DOE. The RCRA program does not currently regulate any radioactive components. We believe that the present division of responsibility, with Atomic Energy Act authorities regulating the radioactive component of mixed waste, should be maintained. This bill would require EPA under RCRA not only to regulate the radioactive component of mixed waste at DOE facilities, but would require EPA under RCRA to regulate the radioactive component of mixed waste at NRC facilities. We are also concerned about the bill's exclusion from the definition of solid waste of "wastes at the time they are emplaced in a repository " pursuant to the Nuclear Waste Policy Act of 1982. This provision could remove RCRA jurisdiction over the hazardous component of certain mixed wastes at the time of their emplacement at a repository. We need to further examine the implications of such a change to determine whether it is feasible and appropriate.

VI. CONCLUSION

In closing, I would like to reiterate that EPA is very serious in its efforts to ensure compliance by Federal facilities, and we will take all actions available to us, including enforcement to improve the environmental status of facilities of the Federal government. Federal facilities have been increasing the effectiveness of their environmental management programs, but further progress is needed if Federal facilities are to meet their obligations to comply with environmental law.

I do believe that we are making significant progress in reaching agreements with DOE for RCRA and Superfund compliance and future cleanups. Obviously, some large and potentially difficult challenges remain. To overcome them and maintain the momentum we have set into place recently will require additional effort by all partners.

This concludes my prepared statement, Mr. Chairman. My colleagues and I will be happy to answer any questions you may have.

The CHAIRMAN. Thank you very much, Mr. Holmes.

First of all, let us talk about Rocky Flats and the particular problem there. Now, as I understand it, at Rocky Flats where they make nuclear triggers, they machine down pieces of plutonium using solvents and lubricants and that they collect up this fluid which has bits and pieces of plutonium in it that they screen that out as best they can, but they are left with a liquid which contains small bits of plutonium in it in a liquid state somewhere with solvents, and the solvent is a hazardous, toxic waste under RCRA and, of course, the plutonium is plutonium. Am I correct on that part of the situation?

Mr. HOLMES. Yes, you are. And if I might just—I did not mean to be rude—I am accompanied by Chris Grundler, who is the director of our Office of Federal Facilities.

The CHAIRMAN. Thank you.

Now, RCRA requires that that liquid be disposed of within a period of time. I think you spoke to that. Would you tell us again what that is.

Mr. HOLMES. Well, I think what you are going into is the land ban question, and for the purposes of land ban underneath the present arrangement, a product can be stored—it can only be stored if it is going to be disposed, and there is a limit——

The CHAIRMAN. Exposed?

Mr. HOLMES. Disposed of or treated.

The CHAIRMAN. Disposed of.

Mr. HOLMES. Right, disposed. And there is only—there is a period of time which is roughly one year which is the duration for how long it can be stored before it is going to be disposed of or treated, and that kind of sums up, I think, the key problem with land ban as it relates to storage.

The CHAIRMAN. And since our facility in New Mexico is not open, there is no place to put that?

Mr. HOLMES. Presently, although there are a number of variances which allow you to still comply with land ban and still operate.

There is a national capacity variance, there is a treatability variance, there is a case-by-case variance. And, of course, what we are looking at in terms of the Waste Isolation Pilot Project, the WIPP in New Mexico is what they call a no migration variance which basically we would state that the waste can go into the facility if it can be determined that the waste will not migrate out of the facility.

The CHAIRMAN. What my question leads to is, is it possible for anyone as contractor to completely comply with RCRA and other laws right now?

Mr. HOLMES. It is possible to comply, and it is possible to comply, one, if they use the variances and secondly, we hope that if the WIPP is up and running, although we are still going through the review——

The CHAIRMAN. Well, WIPP is not running now, so it is obviously not possible.

Mr. HOLMES. Right, exactly.

In terms of the variances, yes.

I might let Mr. Grundler elaborate a little bit.

Mr. GRUNDLER. Well, the waste in question at Rocky Flats, the liquid waste which you mentioned, actually it is not destined for WIPP and maybe Mr. Wakefield would like to add the problem, however, still exists with respect to those liquid wastes is in that there is no treatment capacity available currently, and under the land ban you are not allowed to dispose of those sorts of waste without treating them first because there is no commercially available treatment technology nor DOE treatment technology.

There is no place for this waste to go.

The CHAIRMAN. So, you are telling me it is impossible now to comply with the law?

Mr. GRUNDLER. At the moment, there is this Catch-22 situation because the Energy Department did not avail itself for the variances that Mr. Holmes referred to. So, the way we fix the problem as you are aware is that we negotiate a compliance agreement with the Department of Energy for the continued storage of that waste until treatment capacity could be brought on line.

The CHAIRMAN. All right. So that——

Mr. GRUNDLER. I would only add—excuse me for interrupting—that is obviously a narrow part of RCRA. There are all kinds of other requirements of RCRA which are possible to comply with as well at Rocky Flats in our view.

The CHAIRMAN. All right. There are others. Would you explain what those are.

Mr. GRUNDLER. Well, there are a whole host of requirements that the hazardous waste management law now sets out for people that manage hazardous waste, and they range from monitoring the groundwater to labeling drums to properly storing hazardous wastes to manifesting those.

The CHAIRMAN. Well, give us some examples of some that cannot be complied with at this point, no matter how assiduous the effort.

Mr. GRUNDLER. Well, I do not think I can provide you an example other than the fact that with respect to this certain category of waste at the facility where there is currently no treatment capacity, they cannot comply with the land ban requirement of RCRA. However, the way we handle it at Rocky Flats, as we would handle it at any private facility is that we would negotiate a compliance schedule for that facility to come back into compliance.

The CHAIRMAN. They are provided with a sort of protection.

Mr. GRUNDLER. They are provided protection from civil prosecution for that violation of RCRA.

The CHAIRMAN. DOE is provided with that protection?

Mr. GRUNDLER. That is correct.

The CHAIRMAN. How about the contractor?

Mr. GRUNDLER. The contractor not being a party to that agreement would not be offered that same protection.

The CHAIRMAN. What I am getting at is, there are clearly Catch 22s here, so that no matter how careful the contractor, no matter how skilled the individuals, they subject themselves to prosecution under laws with which it is not possible to comply.

Is that correct?

Mr. GRUNDLER. I would defer to Mr. Stewart with respect to any questions on prosecutorial situations.

The **Chairman**. So far as your understanding of the laws which you administer, is that correct?

Mr. **Grundler**. I would say that people acting in good faith who comply with the law certainly have nothing to fear.

The **Chairman**. Excuse me?

Mr. **Grundler**. I would say that people acting in good faith in complying with the law or attempting to comply with the law have nothing to fear from prosecution.

Mr. **Grundler**. Again, I think this is an area that the Justice Department——

The **Chairman**. That is surely not the question. We know that Mr. Stewart is in good faith and that you can count on him.

The question is, Are we relying upon his good faith, upon his discretion? Can you assure somebody that they are complying, that they can comply with the law? Are there not Catch 22 situations where you must rely upon the good faith or forbearance of the Justice Department? That is the question.

Mr. **Grundler**. Well, what we did at Rocky Flats and what we would do in any situation where there is a violation of the law and the facility could not come into compliance immediately with the law, as is the case at Rocky Flats, we typically——

The **Chairman**. No, you are skipping over the question. The question is a very simple one. Is it possible at all times to comply with the laws that you administer?

I think the answer is clearly no, is it not?

Mr. **Grundler**. I would view signing a compliance agreement which lays out a schedule for coming back into the law as complying with the law, but I am not a lawyer, and I would really ask for Mr. Stewart's assistance.

The **Chairman**. All right. Let us ask Mr. Stewart.

Senator **Ford**. Well, let me ask a question, Mr. Chairman. I am not a lawyer. He said that if they were operating in good faith and that sort of thing, they would not have to be worried about being sued, I guess by other agencies. What about a third party? Does that give a third party a right——

The **Chairman**. I am getting to that question here.

Mr. Stewart, would you speak to that?

Senator **Ford**. What is the perspective with Mr. Holmes' assistance on the third-party suits?

Mr. **Stewart**. I suppose in a logical sense there is always the alternative of shutting down, although there are two problems with that: One, which may be unacceptable from the viewpoint of national security and national needs; and two, waste may still be there even if you shut down. So I think there may be problems where the law and what is practical and feasible to do at least during an interim time period cannot be met.

I think what we——

The **Chairman**. I want to get to the basic question. Everybody assumes this is true, but I want to get it on the record.

It is not possible, then, to comply with the law in a number of areas and still operate the plant at this time?

Mr. **Stewart**. That is my understanding based on what I have been informed by the Energy Department.

The **Chairman**. Do we all agree that that is true?

Mr. **Grundler**. I would only add, going back to my earlier point, that the law provides for ways to get out of this Catch 22 situation through national capacity variances or site specific variances or treatability variances.

The Energy Department has availed itself recently to those variances for certain categories of waste but they did not do that for these categories at Rocky Flats. I do not think there is a defect in the law, and once we discovered this situation—that is, there was no variance or site specific variance applied for—we dealt with it through this compliance agreement.

The **Chairman**. All right.

Do you agree with that, Mr. Stewart?

Mr. **Stewart**. Yes, as I understand the facts from——

The **Chairman**. Why do you then have to give this letter which says we will not prosecute you for not complying with the law if the law is reasonable and can be complied with?

Mr. **Stewart**. I think we are dealing with a rather unusual situation here. In the case of other potential criminal violations, the activity is usually stopped when it is discovered, like contractor fraud. I think in the environmental laws we are dealing with a rather special situation where it takes time and it takes resources to move towards the ambitious goals that are set forth in the environmental statutes.

Of course, prosecutors exercise discretion all the time in various ways, and as set forth in my letter regarding Rocky Flats to Mr. Riley, I think this is a case where it is appropriate.

The **Chairman**. I understand you think it is appropriate, and I am not criticizing that. I am saying if the law can be complied with and if there is no defect in the law, why do it at all? Is your answer that it can be done but it is too expensive to be done?

Mr. **Stewart**. It takes time.

The **Chairman**. It cannot be done within a time limit?

Mr. **Stewart**. That is my understanding, yes. It cannot be done tomorrow at least in some cases. It takes time, and I think the framework here is to set forth a framework that assures the most expeditious movement towards compliance promptly with full disclosure and in good faith.

The **Chairman**. Now, let us deal with this. Do you agree that it cannot be done, no matter how much money you spend and no matter how hard you try, tomorrow? It takes time; is that what the problem is here?

Mr. **Holmes**. The reason we set up the Federal Facilities Compliance Agreement is because we recognize it takes time.

The **Chairman**. It cannot be done today?

Mr. **Grundler**. Rocky Flats cannot come into compliance immediately.

The **Chairman**. Why can it not?

Mr. **Grundler**. Because there is no treatment capacity for these wastes with respect to that violation; and for other violations, for example, inadequate ground——

The **Chairman**. But you can give them a variance, can you?

Mr. **Grundler**. They could have petitioned under our RCRA regulations.

The **Chairman**. But they did not, and we are faced with a status quo now.

Mr. **Grundler**. That is right.

The **Chairman**. So it is impossible. It is not just a question of money or anything else. It is impossible to comply right now because you have to have a WIPP facility to put these things in, and it does not exist, or at least it does not operate?

Mr. **Grundler**. For this particular category of waste, we have to build treatment capacity somewhere, develop treatment capacity to treat the waste.

The **Chairman**. Okay. So finally, I think, we have arrived at the fundamental question. It is impossible to comply with the law and operate the plant. Do we all now agree with that?

Mr. **Holmes**. Immediately.

The **Chairman**. When will it then be possible to comply with the law?

Mr. **Holmes**. The schedule we are trying to lay out in the Federal Facilities Compliance Agreement, which is key here and also has national implications because here we take a very strong look at how it is going to apply elsewhere, lays out a time frame of how long.

Mr. **Grundler**. The agreement is set up for a year. There are various submittals. The Energy Department is required to develop schedules for treatment, to do a national report to see where this problem exists at some of their other facilities so we can address it there. So it sets out a series of deliverables.

The **Chairman**. Now if in fact we cannot comply with the law and there must be, in effect, a negotiated settlement, then the question is what mechanism do we use to negotiate.

Senator McClure and I have provided in our bill, Title VIII, a compliance procedure here, a mechanism designed to negotiate that compliance agreement and, if the compliance agreement is negotiated, that they be insulated from prosecution in the meantime from both State and Federal environmental laws.

Tell me EPA's reaction to that approach.

Mr. **Grundler**. As a practical matter, the solution that you are suggesting in your bill is exactly what we have done at Rocky Flats and elsewhere. Where we discover violations, we negotiate these compliance agreements which provide for schedules to bring the facility back into compliance.

The **Chairman**. Mr. Stewart, what do you think of that basic approach?

Mr. **Stewart**. I think the basic approach of having compliance agreements in place is a good one. As I said, Mr. Chairman, we have not had a chance to look in sufficient detail at your and Senator McClure's proposal.

I guess I worry about blanket immunization, or at least I want to look very carefully at the terms because there are contexts one cannot always anticipate where, for example, in the course of a compliance effort there might be by some individual a rather blatant environmental violation.

The **Chairman**. We provide for willful violations as being not insulated by that.

Frankly, I am concerned about our own bill, and I would like either now or at some other time for you to talk about, after you have had time to think about it, first of all the question of preemption. Can we preempt State and local laws on environmental areas?

Mr. STEWART. That is a serious issue. I think in general I would say under the Supreme Court precedent if Congress makes its intent clear and it deals with Federal facilities or interstate commerce that the ordinary jurisprudence would say yes, you can.

The CHAIRMAN. Next, I am concerned about our definition of environmental laws. We think we understand what we mean by environmental, and I do not know whether that definition could be mischievous when we try to decide whether all health and safety laws are, therefore, "environmental laws" and whether, if you are going to preempt, you must be specific in what you are preempting. That concerns me.

Of course, the practical question I guess the contractors could answer for us is what degree of protection they think they need because they are the ones who will have to operate here.

Let me ask one final question before I turn it over to my colleagues. What is the degree of actual hazard caused by the failure to store or to dispose of these plutonium tainted solvents or other hazardous wastes? Can you tell us the degree of actual hazard, actual danger to the surrounding people or to the workers at the plant?

Mr. GRUNDLER. One of the things that the Rocky Flats agreement does is take a look at the existing storage and whether or not that is adequate. As far as I know, the situation at Rocky Flats with respect to the storage of those particular wastes is not creating any environmental problem, although the agreement requires DOE to give us a report on the storage of those wastes so we can review that to make sure that since these wastes will be stored for longer than we anticipated the storage will in fact be adequate to protect the environment as well as the workers.

The CHAIRMAN. Obviously we need to clean up this problem, but in the meantime would you advise workers that there is not much hazard to their health or any hazard to their health or what is the degree of hazard to their health or the surrounding people? Senator Wirth referred to those who live downwind from this plant. What are they being contaminated with, if anything? Can you speak to that just briefly?

Mr. GRUNDLER. I would minimize the health hazard of the materials that the Energy Department deals with. I do not want to sound like a bureaucrat here, but EPA does not have the sort of expertise that I think Mr. Wirth is looking for in terms of oversight. We are with a regulatory agency. We do not do health studies. That is really within the ambit of the HHS.

Our role is to regulate these materials and to come up with proper cleanup plans. HHS has a very important role as we point out in our testimony under the Superfund program to do the very health assessment that we need to do before we make these cleanup decisions. They are not trivial problems. They are serious problems.

The **Chairman**. When you say they are serious problems, you mean the health hazard is a serious problem or the legal problem of who regulates, or what is serious?

Mr. **Grundler**. I think everyone would agree that the environmental problems at DOE facilities are serious problems that need to be dealt with.

The **Chairman**. What I am talking about is the degree of health hazard to workers or to people who live downwind. Are you saying that those problems are serious?

Mr. **Grundler**. Of course, they are serious. That is why they are on the national priorities list. That is why DOE is spending as much attention and money as they are.

We do not know enough right now in terms of how much there is and where it is going. What we do know——

The **Chairman**. What is going downwind?

Mr. **Grundler**. At Rocky Flats?

The **Chairman**. Yes.

Mr. **Grundler**. I do not know. I have only read reports where certainly there has been detected trace quantities of plutonium downwind, but I am not an expert on the environmental situation at the Rocky Flats plant. I know that people are very concerned about it, but I do not think anybody here can answer the question what is the health risk today and what is the degree of that risk.

That is why the Energy Department and the State of Colorado and EPA are spending the kind of money and time looking at the data and collecting more information as to what the situation is there.

The **Chairman**. So the question is you do not know whether it is serious or not. The allegations may include a very serious risk, but you do not know that; or do you know, and if you do know——

Mr. **Grundler**. Are you talking about the allegations in the search warrant? I want to clearly understand the question.

The **Chairman**. We are dealing here with legislation that gives the government time within which to comply with certain regulations, and the question is are we seriously risking the health of people by allowing some time to comply; or is it so serious that we ought to shut that thing down tomorrow and say otherwise people are seriously at risk. Or is it that there may be some small hazard, some minimal hazard that you can balance those risks and say it ought to be able to continue to operate provided you get in compliance as quickly as possible?

The question is, do you know the answer to that question or not?

Mr. **Grundler**. I would say with respect to the overall facility there is sufficient quantity of waste there and waste that has been released that to EPA there is sufficient information to know that we have a problem and we have to spend money to get our arms around the problem.

I know of no immediate health risks that would suggest that we need to shut the plant today, but there is sufficient information that we need to study the problem and develop long-term solutions to it.

The **Chairman**. All right. I think that is fair.

Mr. Wakefield.

Mr. **Wakefield**. Mr. Chairman, we are certainly aware that we are in violation of environmental laws at Rocky Flats as well as at most of our other facilities, particularly in the area of storage and treatment of the waste.

We are not aware and we do not believe that there are any serious health or safety hazards at Rocky Flats today, and I certainly concur with Senator Wirth's view that when you send in a number of FBI agents the people near you are going to be nervous. They are going to have anxieties. What is going on here? They are going to be concerned.

The Attorney General of the United States has promised Admiral Watkins that if anything is found that implicates the health of the workers or of the people in the surrounding areas, or that suggests that there is a safety problem, we will be immediately notified so we can take whatever action is necessary and appropriate under the circumstances at the time.

The **Chairman**. Now that I have posed the question, I want to be sure that we are all in agreement on this.

I want to be sure that so far as anyone knows, there is no health hazard right now resulting from the failure to comply with the law. Is that an overstatement?

Mr. Holmes, can you speak to that?

Mr. **Holmes**. I think it is the potential health hazard that has everybody worried, and that is the link to the WIPP. That is the problem.

The **Chairman**. What about potential health hazard?

Mr. **Holmes**. I think that what we are trying to say is we are going into a Federal Facilities Compliance Agreement. Three parties are trying to act responsibly to make sure that the people in the surrounding area are not endangered. Yet, in the back of our mind is the potential hazard associated with these wastes.

The potential hazard is huge. That is why the Department of Energy is spending up to $800 million on the WIPP. It will take 250,000 years before the plutonium that goes into the WIPP exhausts itself. It is a huge problem.

The reason why the mixed waste question becomes so critical and the reason why the hazardous constituents are of such concern to us even though they may appear in terms of volume or in terms of potency to be smaller is that when the hazardous constituent interacts with a radioactive constituent, it increases the mobility of the radioactive constituent. The radioactive constituent goes into the ground, some felt a long time ago by itself. It would become maintained in one spot. You link it up with a hazardous constituent, and it migrates.

The **Chairman**. By "potential", you mean——

Mr. **Holmes**. If not handled responsibly.

The **Chairman**. So that in the places where these are and in the way it is being operated now, you believe there is no health hazard. But it must be carefully done and it must get in compliance in order to avoid that potential health hazard.

Mr. **Holmes**. In the place where it is now, we are doing our best to make sure that there is no health hazard, but you are dealing with properties and a technology that is exceptionally complex.

The CHAIRMAN. For example, there are no hazardous discharges that we know of now, no plutonium dust, no smoke, none of that being discharged now that anyone knows anything about?

Senator MCCLURE. Be careful to differentiate between the nuclear materials and other hazardous waste as you answer that question, if you will, please.

Mr. HOLMES. Thank you, Senator.

Mr. GRUNDLER. Quite frankly, I do not feel comfortable answering that question because I am not managing that site either for EPA or for DOE.

We know that there are releases of hazardous and radioactive materials into the environment at that plant, and there have been in the past. We know of no immediate health risks that require DOE's or our attention. Certainly as Mr. Holmes said, the potential is huge, and that is why everyone is concerned about it and doing what we are doing.

The CHAIRMAN. I apologize to my colleagues for going into such detail on that question. I wanted to try to get it resolved, and I am not sure I did.

Senator Ford was the first to arrive.

Senator FORD. Mr. Chairman, I was waiting with bated breath for an answer to your question which I am not sure that you secured. You kept at it, and I think that you are on the right track.

Mr. Wakefield, did I understand you to say that DOE is in violation at all 17 sites in one manner or the other?

Mr. WAKEFIELD. I am not sure I could definitively say all, but I can certainly say most.

Senator FORD. Mr. Holmes, with all the Federal laws and all the State laws and everything else, how did we get in this mess? You have laid out law after law and you gave us the alphabet and put it in a bowl of soup, and we wind up here and everybody is in trouble.

How did we get here?

Mr. HOLMES. That, to say the least, is not an easy question to answer.

Senator FORD. Well, we have to try. We are getting ready to give you some legislation, and you better very well help us or you are going to get the wrong kind of legislation.

Mr. HOLMES. Here is how I think it evolved. You started off in World War II and post-World War II with a development of nuclear weaponry. You had a society and a culture which was not as attuned to environmental protection as it is attuned now.

The production of the weaponry continued through the 1940's, 1950's, and 1960's. Then the 1970's came along, and some rather dramatic changes in our culture took place. It was reflected in the laws, particularly in the first Solid Waste Disposal Act in the mid 1970's that set out the standards that we are living with.

Then as we moved into the 1980's, the laws really tightened up, and the combination of the Superfund laws with their links to other laws put us in a situation where you had laws that were stringent, and you had a Department of Energy that was not used to complying with the laws and, frankly, had some real doubt as to whether the laws applied at all.

It was not until a court order and a decree that we got into the late 1980's when we were complying with the laws.

So where we are is the problem is basically you have the laws on the one hand, you have the producers on the other hand finally trying to catch up with each other, and they did not go hand in hand. I think that is why you have this tremendous debate and some parties' confusion.

Senator **Ford**. You are saying that we are after the fact; we let it get in trouble before we passed the laws to clean it up; is that correct?

Mr. **Holmes**. In my opinion, we did not pass the kinds of laws early enough, but now we passed them.

Senator **Ford**. Mr. Wakefield, do I understand you to say that if we follow the Admiral's suggestion that statutory provisions are not necessary? With his program of clean-up and such, that what we are doing here today as it relates to a piece of legislation would not be necessary?

Mr. **Wakefield**. No, Senator Ford. I think the Admiral has taken a number of steps to move us in the right direction, but I think that ultimately what we need to take into account is that we do have a serious problem on a national basis that has been caused by 40-plus years of environmental neglect. It is a big problem that is going to take large amounts of money and a long period of time to fully clean up.

I think this committee is doing well to consider the kinds of legislation we need to ensure that we have compliance agreements, that we live under those compliance agreements, that we move, as I suggested in my testimony, in an orderly way to prioritize these matters on a national basis, because even if we had the money we could not clean them all up at once.

Different plants that have more serious problems have got to be given higher priority, and that has to be determined on a national basis. We cannot let each state determine that it goes first.

So I think there is legislation that is advisable and would be helpful, and we will be happy to work with this committee to help——

Senator **Ford**. What statutory provision should we impose to follow the admiral's position as it related to establishing priorities?

Mr. **Wakefield**. I think I would essentially put it in the context of the Five-Year Plan that the admiral has developed to try to come up with an overall national plan. So far, we have had success in working on this. We have brought people in. We have negotiated it. We brought in the States. We brought in other interested groups around the country.

I am concerned that when push comes to shove we are going to see a lot of aggressive State officials, perhaps environmental groups, that are going to say, "That is fine but you did not give us a high enough priority, we want a higher priority, we want our place cleaned up first." We cannot clean everybody up at once, Senator Ford.

Senator **Ford**. I think we ought to have a predictable schedule that everybody could rely on. That predictable schedule has to be, I think, factored into what we are doing here.

Let me ask Mr. Holmes if the storage problem is the only major health problem you have at Rocky Flats? Is that the problem? If he wishes to shift that to his assistant, that will be fine.

Mr. **Holmes**. The storage problem is the major land ban problem. There are alleged other problems.

Senator **Ford**. What are the alleged other problems, Mr. Holmes?

Mr. **Holmes**. I would prefer to give that one to the Justice Department, because there is a potential criminal investigation ongoing there right now.

Senator **Ford**. We always find that anybody can hide behind legal questions, and so we want to turn it over to——

Mr. **Holmes**. The affidavit that accompanied the search warrant alleged that there was illegal disposal of waste and releases of waste at the facility.

Senator **Ford**. When will that be determined, if that is true?

Mr. **Holmes**. I gather we are now looking through all the documents, all the evidence that was taken out of Rocky Flats. I cannot give you an exact date.

Senator **Ford**. Have you got a ball park figure?

Mr. **Stewart**. Senator Ford, I would say the criminal investigation is ongoing. It is a very large facility. There is an enormous number of documents. It is not our policy at the Justice Department to really give timetables. All I can is we are working as hard as we can.

In fact, I am going to be out in Denver tomorrow to confer with the U.S. Attorney and make sure that we are proceeding as expeditiously as we can.

Mr. **Grundler**. Senator, if I could add, you are focused here on the current part of the problem, in my opinion, at Rocky Flats. The cleanup problem we are dealing with at Rocky Flats is from the past disposal of waste there. There are solar evaporation ponds. There is the hillside 881 groundwater problem. There are discharges to drainage creeks. Those are the real environmental problems with which we are grappling with.

The storage problem and the problems alleged in the search warrant really go to operational problems and how that plant is operated and managed in a day-to-day manner.

The environmental cleanup problems we are dealing with separately and on a longer track.

Senator **Ford**. Since you are the expert at the table, would you tell me what in your judgment is being transported to Denver 12 miles away by the prevailing winds?

Mr. **Grundler**. I cannot answer that question, Senator.

Senator **Ford**. Is there anything that you suspect that would be in the prevailing winds that would take it to Denver?

Mr. **Grundler**. I am sorry, but I am not familiar enough with the operations. Mr. Holmes' office is dealing with the hazardous waste problems, the past discharges to the soil and the groundwater, and I cannot answer the question.

Senator **Ford**. If you know about ground water and everything else, it looks like you ought to know something about the air. I suspect you have an opinion but you are just not allowed to give it today.

Now you said in the storage area that we must develop a facility and method of treatment of this liquid at Rocky Flats. What did you mean by "develop a facility and method of treatment"? Are you telling me you have no method and no treatment available as it relates to the liquid or what is in storage?

Mr. GRUNDLER. Not at this time. The problem you have here——

Senator FORD. Nobody has it, and you could find it any place in the world? The clean-up of that facility and the liquid cannot be found anywhere?

Mr. GRUNDLER. I do not know with respect to how anybody in the international community would like to take this waste, but certainly nobody——

Senator FORD. I am not talking about taking the waste. I am talking about cleaning it up. You said "facility and method of treatment". Do we not have a method of treatment today?

Mr. GRUNDLER. For some of the Department's mixed waste, that is exactly correct. There is no technology to destroy the mixture of radioactive——

Senator FORD. So what we are talking about here is additional and speedy research to find a method of treatment; is that correct?

Mr. GRUNDLER. Yes, sir.

Senator FORD. Mr. Stewart, let me ask you this. You said a moment ago that your department, I guess meaning the administration, is committed to the clean-up of all 17 sites. How are you committed to the clean-up of all the 17 sites?

Mr. STEWART. I would say that the Department of Justice's role is of facilitator trying to help get the Energy Department, EPA and, where appropriate, the states together to get a compliance agreement that has the force of law in the sense that states and private citizens can enforce these agreements in court.

So it is not just getting the agreement in place but making sure that it is legally enforceable.

Senator FORD. You seem to use a tactic, Mr. Stewart, that has been used for nine years now; that is, cost. We always get that great big cost out there. It is going to cost you more in taxes. Yet, we read the lips and have been reading them for some time, and we are accused of wanting to increase taxes. Congress was beat upon a little bit, but you dropped it in and kind of went right over it to tell us how much more money this is going to cost.

Do you have some idea of how much it is going to cost?

Mr. STEWART. No, I do not.

Senator FORD. Why, then, did you drop it in? It seems to me if you are going to use that, then you ought to be able to support your statement.

Mr. STEWART. I would associate myself with Mr. Wakefield's statement that we cannot achieve compliance overnight and, therefore, we need some prioritization. I think it is not just cost but the relative seriousness of the environmental concerns.

Senator FORD. You talked about money, and when money pops out there we talk about having to pay more taxes; therefore, we are saying nobody wants to pay taxes so we will just kind of roll along and give them the variances in the law. Everybody apparently has variances here to keep right on working.

So the public out there and the workers out there are still being subjected to something that we want to give variances to so they can keep right on working. Is that correct?

Have we given variances to the contractor so that they can continue to work?

Mr. STEWART. I have not given any such variances.

Senator FORD. Have you condoned it as their legal adviser?

Mr. STEWART. I have tried to make sure we come into compliance as quickly as possible.

Senator FORD. Have you advised your clients to exercise a variance so that they might be in compliance or they can continue to operate?

Mr. STEWART. No, I have not given any such advice.

Senator FORD. Are you aware that they have given a variance?

Mr. STEWART. The law, as has been stated here, provides for various safety valves and variances that are in the statute.

Senator FORD. I am not a lawyer, but I heard them say that you had to ask for it. Since the operator at Rocky Flats did not ask for the variance, then there is no variance to be given at Rocky Flats and it must adhere to whatever the stringent law is, if it is stringent.

Mr. STEWART. That is the prima facie legal position, yes.

Senator FORD. I thank you, sir.

The CHAIRMAN. Senator Wirth.

Senator WIRTH. Thank you very much, Mr. Chairman. This hearing has been enormously helpful in terms of focusing on the very severe problems that we have at Rocky Flats. Let me, if I might, take it from the top again.

There are a lot of different issues in all this but there are four fundamental issues at Rocky Flats. One is clean-ups, which you have focused on.

The second is the operational problems, subject of much of the litigation.

The third set of problems is the storage issue. What are we going to do with the radioactive materials produced there after we get to the 1,600 cubic yards? Where do we go from here?

Fourth is the health issues.

What I would like to do is to again bring us back to the health issues which, Mr. Chairman, which get the last bit of attention on a regular basis. The purpose of my questioning and this legislation that I have offered is to attempt to get the health issues back up at the top of the agenda. The EPA told us this morning these are not trivial problems.

This morning, the administration panel stated, in response to your questions about health research, that no one here can answer the question of how serious the risk is. This is precisely the point. No one here can answer the question because the expertise does not exist at EPA or DOE or the Justice Department.

What has happened, Mr. Chairman, is that over the years of operation at the plant the health data has been, for the most part, kept secret. Priority has been given to production, not health, not safety, not environmental concern. That is very well documented. There really is no capability at DOE to look at this.

You asked the question——

The CHAIRMAN. Would the Senator yield?

Are you saying that these witnesses agree with your statement that——

Senator WIRTH. I am just going through what the witnesses have said about the size and scope of this problem. I am only quoting the witnesses testimony from this morning, Mr. Chairman.

The very recent criticality study at Rocky Flats released only two weeks ago, found that kilograms of plutonium having the potential for criticality were found in an exhaust ventilation duct outside the filtering system. These are kilograms of plutonium found outside the filtering system.

Now does that not suggest to you if those were found outside the filtering system that plutonium may have gone any of a number of other places? There is a lot of evidence, to suggest that workers at the Rocky Flats plant have experienced a 61 percent excess rate of cancer over the last ten years, at least suggesting that there are trends and themes of health problems that exist out there.

In answer to your question do we know of things that have happened out there, the answer is yes.

Now let me go to the point of this legislation and the testimony of the Department. The Department told us in its testimony that its epidemiological activities are central to protecting public health and safety, and we agree with that. We really appreciate that this has finally been recognized.

Then Mr. Wakefield went on to say that the legislation to tranfer the research responsibility to the Department of Health and Human Services is premature. The question is, is in fact this premature? Let me ask you a number of questions about that.

Last year the Department of Energy announced a risk notification program for workers exposed to beryllium, a highly toxic metal with known adverse health effects. Has the Department made any progress on implementing that program?

Do you know, Mr. Wakefield?

Mr. WAKEFIELD. I am not aware, Senator. I am not familiar with that.

Senator WIRTH. The answer is no, but we would like to get an answer for the record if we might. You are a lawyer; but again, when you say this is premature, the point that I am making is that this is not premature.

Second, does the Department have the personnel to carry out the epidemiological research and health monitoring? Do you have the personnel to do so?

Mr. WAKEFIELD. I do not know with certainty. My guess would be we do not.

Senator WIRTH. You do not.

Mr. WAKEFIELD. That is correct.

Senator WIRTH. The DOE so testified to that just a month ago in the House of Representatives, pointing out that the entire health area has only 125 people, 10 of those outside of Washington, DC, and, further, that there are no formal training requirements for inspectors. You have 10 inspectors, 10 health personnel outside of Washington, DC for inspecting this whole set of plants, setting standards, doing the epidemiological data collection and standard setting.

Now you are testifying to do something about this is premature. I would argue that it is not premature. The time has come for us to look at the real problem and insist that those with the expertise handle the health research.

Third, the DOE epidemiology program manager, Dr. Robert Goldsmith, reported at the epidemiological program review panel hearing that he does not think the data and the findings of the research program at DOE are being translated into effective policy. To quote Dr. Goldsmith "Radiation standards are set by international and national bodies that would use the publications. Other than that, there is not much translation of the results into anything."

That is your person saying we may have some research that is going on out there, but we do not have the capability to translate that into health standards and into safety standards and into the changes that have to be made.

The point I am making, Mr. Chairman, again is that of all the issues out there, health continues to get the bottom consideration. We know that there are some very significant health problems out there, as I outlined, both in releases and the implications of those and the data already.

We know the DOE does not have the capability to handle this. DOE's own people say they do not have the capability to translate the epidemiological research into effective action at the Department; yet, the Department keeps saying that a transfer is premature.

Mr. Chairman, it is just as obvious as it can be that a transfer of this responsibility is not premature. I understand it is threatening to a bureaucracy—to have somebody come in from the outside and say no, you have not. People are going to get defensive.

What we have to do is let you all tend to the first three problems, the problems of cleanup and operations and storage. You cannot possibly handle the fourth, which is health, when you do not have the expertise and do not have the capability.

The point that I would again make very obviously, Mr. Wakefield, is that it is not premature for this kind of separation of health from the Department of Energy. Let us do what other agencies do: the Department should let the agencies with the expertise, which are HHS and NIOSH, handle this set of questions.

Again, walking you through where we are, Mr. Wakefield, please respond in whatever way you think——

Mr. WAKEFIELD. If I may, Senator Wirth, I did not mean at all to imply by my testimony that concern over health was premature or that we were not moving forward as quickly as we could under the Admiral's administration to try to deal with the problem.

I think the only point which he has made and I would reemphasize is he would like to have the advice of the Blue Ribbon Advisory Board that he has appointed before he makes that determination. His feeling from a bureaucratic standpoint, if you will, is that we have the line responsibility in the Department. We can handle these problems better there. If the blue ribbon panel says, "No, you cannot, it is better at HHS," he will accede to that.

Senator WIRTH. That is exactly the issue. You all have the line responsibility. Your responsibilities are operations. Your responsibilities are clean-up. Your responsibilities are storage. Your responsibilities and expertise are not health research, health monitoring, health standards. That is not the set of responsibilities for the Department.

That is precisely the problem that we have had at Rocky Flats and these other facilities for such a long period of time. The operations have overwhelmed the health and safety research.

If I might, Mr. Chairman, I would like to put into the record a series of questions that have been made available to us by the Industrial Union Department again. There are seven of them. They appear in the testimony which will be given later by Mr. Mallino. They are questions focused to the Department. If we might have those appear in the record and be transmitted to you and ask Mr. Wakefield if he might answer those.

Mr. WAKEFIELD. I would be pleased to, Senator Wirth.

Senator WIRTH. Finally, if I might, Mr. Chairman, I would like to jump to one final issue; that is, the storage question at Rocky Flats. The question is, what happens after the 1,600 cubic feet ceiling is reached? What happens next?

You are familiar with that question, I know, Mr. Wakefield.

Mr. WAKEFIELD. Yes, Senator. The suggestion had been made by the Department of Energy that maybe we could get the seven Governors of seven western States all to accept a little bit of the TRU waste that is generated at Rocky Flats, and the answer from those Governors was a pretty resounding negative.

Right after that, Mr. Leo Duffy of the Department met with Governor Romer. Governor Romer asked Mr. Duffy in light of this rejection what DOE's fallback plan was. To the governor's great concern, Mr. Duffy said that DOE at that time did not have one. This was a few days ago.

Senator WIRTH. Given the fact that the six other governors have said no to storage, what is the current DOE plan for how to deal with the storage of this waste, or are we going to get to the watershed where Governor Roemer is forced to say shut it down?

What is your plan now for dealing with the waste?

Mr. WAKEFIELD. I hate to give you the bureaucratic response by saying we are still in the process of developing that, but——

Senator WIRTH. When does the time arrive when the 1,600 cubic yards is reached?

Mr. WAKEFIELD. My understanding is that it will be next March, Senator.

One key factor in what our plan will be, of course, depends upon when WIPP might be open, and I do not believe——

Senator WIRTH. But nobody is holding their breath that that is going to happen anytime soon, are they?

Mr. WAKEFIELD. As the Admiral testified here three weeks ago, the earliest that is going to happen is July 1, so we know we have at least a 3 month——

Senator WIRTH. So we have a March to July gap, at least that, and that is the best projection as to what happens with WIPP; correct?

Mr. WAKEFIELD. Yes.

Senator WIRTH. That is a great concern. I know it is of great concern to the Department of Defense from a national security point of view. It is of great concern to the people who are working and operating around the plant to adjust themselves as to what to do.

I know he has have the bureaucratic response, but I hope that this is the kind of very high priority consideration that we think it deserves, and I know you do, too.

Mr. **Wakefield**. I can assure you it is receiving high priority consideration.

Senator **Wirth**. We look forward to hearing from you on that. It is putting all of us in Colorado in a very awkward position. We realize the national security side of it, but this problem has been laid out for a long period of time. We do not yet feel as if we have coming back from the Department the kind of reasoned alternative that we are going to have to see.

I know it is a difficult question.

Mr. **Wakefield**. I understand, Senator, and let me just add that Governor Romer has been extremely cooperative and helpful to us in trying to deal with a very difficult problems on both sides of the line, national defense on one side and serious, justifiable environmental concerns on the other.

Senator **Wirth**. Fine.

Thank you very much, Mr. Chairman. I will have one final question on RCRA and the states' role in that to submit for the record to Mr. Stewart and to Mr. Wakefield.

The **Chairman**. Senator McClure.

Senator **McClure**. Thank you, Mr. Chairman.

I notice that the testimony almost uniformly gets back to a question of negotiating compliance agreements. Compliance agreements have been negotiated with several different states; is that not correct?

Mr. **Wakefield**. That is correct, sir.

Senator **McClure**. Now in any of those compliance agreements, has the state been a party?

Mr. **Wakefield**. Yes. At least the one in the State of Washington is a tri-partite agreement with the State, EPA, and DOE, and we are anticipating hopefully before the end of the week that we will enter into an agreement with the Colorado Department of Health.

Senator **McClure**. With respect to Rocky Flats?

Mr. **Wakefield**. Yes.

Senator **McClure**. I noted that the ones of which I am aware, Washington being the exception, the states have no part in the negotiation of the compliance agreement. Is that right, Mr. Holmes?

Mr. **Holmes**. No. I'm sorry, Mr. Chairman. It depends on which kind of agreement. If they are the interagency agreements under CERCLA, the states have a very strong rule. We attempt to involve the states in almost all of our agreements.

Senator **McClure**. You involve them, but they are not signatories to the compliance agreements?

Mr. **Holmes**. On the interagency agreements they are signatories.

Senator **McClure**. They are signatories?

Mr. **Holmes**. Yes.

Senator **McClure**. The state is bound by that agreement?

Mr. **Holmes**. Yes.

Senator **McClure**. Let us take a look at Rocky Flats, for example.

Are the RCRA requirements being met at Rocky Flats?

Mr. HOLMES. The Federal Facilities Compliance Agreement was only signed in September. We believe that they are.

Senator McCLURE. In that compliance agreement, is the State of Colorado a party?

Mr. HOLMES. Yes.

Senator McCLURE. They are bound by that agreement, too?

Mr. HOLMES. Yes, they are.

Senator McCLURE. Under the bill that I have joined in with Senator Johnston, there is a section with respect to compliance agreements.

Have you had an opportunity to read that section?

Mr. HOLMES. I have had an opportunity to read it, but we unfortunately do not have an official position yet.

Senator McCLURE. I understand that.

The bill would require a period upon a finding of noncompliance for a stay of enforcement of one year or up to one year pending negotiation by DOE, the EPA and the state covering current and past waste management practices.

Mr. Wakefield, in your opinion will such a stay expedite compliance agreement negotiations?

Mr. WAKEFIELD. Senator McClure, I think in part the answer to that is what kind, if any, of a dispute resolution mechanism there is at the end of the period.

Senator McCLURE. Under the bill, if the parties do not agree it can be tested in court at the instigation of any of the parties.

Mr. WAKEFIELD. Yes, and I indicated in my opening remarks, Senator, that we do not believe that is the best mechanism. We think it is better to handle this within the Executive Branch and that there should be some kind of dispute resolution mechanism written into law.

Senator McCLURE. What, then?

Mr. WAKEFIELD. I think something that the administration would develop perhaps by rulemaking. Perhaps it could be spelled out in the legislation.

Senator McCLURE. You are going to have to have something somewhere in the statute to deal with the question of if the parties do not agree, what then.

Mr. WAKEFIELD. I agree with you completely. I am just saying in my view that should be done within the executive branch rather than bringing the judiciary in.

Senator McCLURE. It will require some change in current law, will it not?

Mr. WAKEFIELD. Yes.

Senator McCLURE. So if you want it done in the administration, you are suggesting we pass a law that says the administration can do it and everybody else has to stand aside and accept the results?

Mr. WAKEFIELD. I think that would be one way to do it, Senator McClure.

Senator McCLURE. I do not mean to make that the most pejorative term possible. I understand that administrations like to have discretionary authority, and they do not like to have mandatory provisions.

I have been around here long enough to see several administrations, and every one of them feels the same way. Just tell us what to do and we will do it well and then stand aside and do not question us too much. That is part of why we are in the problem we are in, because we did not question enough. The Congress has a responsibility that has not been discharged very well by the Congress, in my opinion.

Incidentally, I want to make an aside with respect to something Senator Wirth said a moment ago and not because I disagree with him but because I want everybody to understand what I understood was said.

When the Secretary testified before this committee three weeks ago with respect to the opening of WIPP, he did not say WIPP will open next July.

Mr. **WAKEFIELD**. No. He said that would be the earliest, Senator.

Senator **McCLURE**. If everything worked perfectly well, it could then possibly be opened by that date, but it was no prediction that everything would work well.

Mr. **WAKEFIELD**. Yes.

Senator **McCLURE**. The reason I suggest that is that there have been dozens of deadlines established already and missed, and I do not want one more prediction. I know the Secretary is careful in his comments, and under question from Members of this committee he was even more precise in his comments. The next day there were headlines all over New Mexico that the Secretary says it is going to open on July 1. People of the press have a tremendously difficult task to try to understand ambiguous testimony. [Laughter.]

And you give us ambiguous testimony, so you cannot blame the press. As a matter of fact, if they play on the ambiguities in your statements and come to a conclusion which might be a little different than you wanted them to reach or reported it differently, if you want them to report it correctly you have to make fairly precise statements. Frankly, I do not see those happening in much of this.

Over several moments of time, the Chairman was trying to get a definite statement with respect to health hazards at Rocky Flats, and what he got is enough ammunition for the press to say whatever they want to say. [Laughter.]

You cannot blame them if they do because you did not answer the question. None of you answered that question very precisely. Justice is careful. Justice is always careful. [Laughter.]

Mr. **STEWART**. And also scientifically ignorant, Senator.

Senator **McCLURE**. I hope you got that really accurate.

Senator **METZENBAUM**. The point is politicians are entitled to obfuscate the facts and you are not. [Laughter.]

Mr. **WAKEFIELD**. Senator McClure, I heard Admiral Watkins' testimony 3 weeks ago, and he was about as unambiguous as someone could be in saying that if everything goes right, July 1 is the earliest date. I hope I have not been any more ambiguous than that here today.

Senator **McCLURE**. No, you have not, but I wanted to take one more attempt on the record to set the record as absolutely firm on that as it is possible to be. No one has any assurance on what date WIPP will open.

Everybody does know there is going to be a problem sometime next spring with respect to wastes at Rocky Flats, and we are going to have to make a very, very tough decision at that time.

Now the Secretary has suggested that there are seven states, without identifying which ones. We could only just guess that it is Colorado, Washington, Idaho, Nevada, Tennessee and South Carolina. I am only just guessing because the Secretary never did really say where those would be.

It has been suggested, if I might steal a Mo Udall line, by some brilliant person—perhaps it was me—that instead of asking seven states to accept these 48 boxcars of material that we can now anticipate will have to be placed somewhere, there are 48 contiguous states, and we will just spread this great opportunity equally across this country and ask each state to take one.

Is that sufficiently patriotic?

Senator MURKOWSKI. You are discriminating against Alaska.

Senator McCLURE. Well, we will send some up to Alaska if you really want it, and you have lots of room up there in all those public lands.

Senator MURKOWSKI. I have lots of room up there. That is right.

Senator McCLURE. Really, you are going to be asking some states to accept additional storage on a temporary basis of wastes generated at Rocky Flats sometime early next year, and you are going to ask them to do that on the basis that national security would be affected by the shutdown of Rocky Flats. That is something I happen to agree with. Anybody in possession of all the facts would recognize that there is truth in that statement.

If some states are to be asked to accept a burden in the name of national security—and they all regard it as a burden—there is nothing that could be done better than put one boxcar in every state. That is fair. The states that are asked to accept more will say, hey, why us, we do not want it. It is your patriotic duty to do it. There are 48 states that have equal patriotic duty, I think.

I am concerned about something I have observed over the last 20 years of time. If you ask a state to accept and give them the opportunity to say no, they are going to be forced by political pressures in their own states to say no. I see no state coming forward today, tomorrow or early next year and saying, hey, we are really responsible, we are going to take more.

Senator Johnston and I two years ago, I guess, suggested at some point that we were going to have to give an economic incentive to states to accept, and I think we are going to have to do that because states do not want this material. They want to be defended. They want national security. They know that nuclear weapons are the cornerstone of our national security policy, and yet we have people in government who are telling people there are great dangers to all of this domestic operation.

I am not going to say privately what I refuse to say publicly. DOE has not been responsible in the past, and I do not think EPA and Justice were very responsible earlier this year. We have a national problem that must be dealt with, and while people pursue their own agendas within various agencies, national security is jeopardized.

I do not care whether it is DOE that fails to do the job or EPA or Justice who seeks to pursue their own agenda within their own narrow parameters, American and free world security is jeopardized.

There is no one who is going to suggest that anybody that might attack the United States—and the Soviet Union is the only one against whom we erect these defense—has to get clearance from EPA before they can attack, although I am sure EPA would like to do that. We would condemn them if they did not.

Mr. Chairman, I very much appreciate the series of hearings, and I think we need more precise answers to questions like we asked this morning and which were not very precisely answered. You can be more precise than that.

You say we do not really know. I have read. Maybe I am wrong, but I will bet there is not another person in this room with the possible exception of the witnesses at the table who have read the affidavit in support of the search warrant at Rocky Flats which is, as I understand, a collection of mights, could bes, perhaps, maybes, fears, innuendo.

Let us get one thing straight about Rocky Flats right now. I suspect you have read it, too.

Senator WIRTH. I have read it. [Laughter.]

Senator McCLURE. Not very many have read that.

A search warrant must necessarily include all the suspicions that any party to it could possibly erect. Yet, people will read that and have read it as allegations of facts.

Is it not a fact that at Rocky Flats there is no radioactive contamination of waste water that is documented today?

Is that right, Mr. Holmes?

Mr. HOLMES. I cannot answer that.

Senator McCLURE. Mr. Wakefield.

Mr. WAKEFIELD. I am not aware of any, Senator.

Senator McCLURE. Mr. Stewart.

Mr. STEWART. I am not aware of any.

Senator McCLURE. Let me put it the other way around. So far as you are aware, there are none.

Is that correct, Mr. Stewart?

Mr. STEWART. Yes.

Senator McCLURE. Mr. Wakefield.

Mr. WAKEFIELD. So far as I am aware, there are none, Senator.

Senator McCLURE. Mr. Holmes.

Mr. HOLMES. That is correct.

Senator McCLURE. Yet, I suspect there are a great many people in Colorado who believe there is radioactive contamination of ground water. The contamination that has occurred to ground water in Rocky Flats is similar to that which has occurred in Idaho, industrial solvents. They are hazardous waste.

Senator WIRTH. If the Senator might yield, just down grade from Rocky Flats is the Great Western Reservoir which provides water for Broomfield. In the sediment at Great Western Reservoir has been found traces of plutonium. Now that has been known for a long time. Many years ago we developed an alternative water program for Broomfield, so if there was a major spill in the Great Western they could get Denver-bored water. That has been there for some time.

What has happened recently and been discovered, we really do not know.

Senator McClure. We really do not know. As a matter of fact, you will examine groundwaters anywhere in the world, and you will find: one, some background levels of radioactivity; and two, some contamination from human activity, mostly strontium that came from atmospheric tests of nuclear weapons a long while ago, much of which was Russian in origin but not exclusively that.

We need very badly to get on the record the parameters of the discussion which we are talking about. The public is frightened of nuclear contamination. We talk about hazardous wastes at Rocky Flats, and they immediately assume that if there is contamination of the water it is radioactive contamination. As a matter of fact, it is industrial wastes similar to that found at many other industrial installations.

You are right when we worry about the mobility of those wastes that the migration is enhanced by the presence of industrial solvents. I think that was your testimony, was it not, Mr. Holmes?

Mr. Holmes. Yes, sir.

Senator McClure. The presence of industrial solvents does not necessarily mean that there has been migration of radioactive wastes; is that correct?

Mr. Holmes. Not necessarily at Rocky Flats, but there has been at other facilities.

Senator McClure. Yes. Idaho National Engineering Laboratory is one such facility.

Mr. Holmes. Hanford I was thinking of particularly.

Senator McClure. That is correct, also, along with the fact that we have liquid wastes stored at Hanford and have had for a long while, an urgent matter upon which priority should be set, upon which money should be spent.

We have the capacity now in a technological sense to deal better with those wastes than we are now doing. The technology is available. It is not always because we do not know how to do it. Yet, some of those facilities are not being operated because we do not have the whole package put together and no assurance to anyone that we know when the pieces will fit together.

I am a little bit concerned, Mr. Stewart, that the answers given to the questions by the Chairman this morning with respect to whether or not we can comply with the law almost uniformly across your testimony in answer to questions was no, current law cannot be complied with.

From DOE, we will negotiate compliance agreements. We have done some in the past; we will do some in the future. From Justice, do not worry about us, folks. We are just friendly prosecutors, and we will never prosecute anybody who confesses they are bad. So we will have a government by men, by individuals, exercising independent discretion and not by law which everyone can read, understand and comply with.

EPA is one of the worst I can imagine in terms of due process to American citizens. I do not know why the ACLU has not closed you down because you constantly refuse to take fixed positions, because you constantly say we do not know.

We are going to make you do something. We do not know for sure what it is. We in the Congress have given you the authority to do that, and shame on us, because we have in this country today not been able to come to grips with these problems in a precise way. We in the Congress write lousy laws, and you accept the discretion we have given you because you intend to do good.

There are a lot of people out there who are wondering just what does that mean. You have people through every one of these DOE complexes today afraid to make a decision. The only way they can avoid possible criminal prosecution is to do nothing. You cannot pin it on me if I did not make a decision. I do not blame those people because the laws we have passed are not precise enough for them to understand what is required of them, and EPA will not say.

Justice says do not worry, we will not prosecute unless we think you deserve it. How would you like to be on the other side of that? I would not like to be on the other side of that, and if the Admiral is having trouble getting good staffing at DOE facilities, a large part of it has to be contractors and contractor personnel that simply cannot hazard the exposure to criminal prosecution that is implicit in the current situation which simply cannot be tolerated any longer.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator McClure.

Senator Metzenbaum.

Senator METZENBAUM. Thank you, Mr. Chairman.

Mr. Wakefield, the Inspector General's recent report, as I indicated earlier, makes for very disturbing reading. The Inspector General has thoroughly documented terrible deficiencies in the Department's relationship with its contractors, most of which stem from DOE's policy of total indemnification for contractors.

As you know, this has been a matter of legislative controversy in which I have been involved for a number of years. The Inspector General says that the Department of Energy writes the contract so that the contractors can just require DOE to pay the penalties.

I have two simple questions. Why should the Department of Energy indemnify Federal contractors for violations of Federal law? Secondly, as general counsel, what are you doing to implement changes called for by the Inspector General's report?

Mr. WAKEFIELD. Senator Metzenbaum, I think you have touched upon an issue that is of great concern to us and that we are moving forward to address.

We are planning to come out next month—during the month of November—with a Notice of Proposed Rulemaking that will address this issue as well as the other issues that we have to address in dealing with our contractors. I do not think we can just take this issue of indemnification in a vacuum. I think we have to look at our total relationship with our contractors.

I anticipate that when we come out with the Notice of Proposed Rulemaking, we will be very specific in where we are going without trying to ultimately prejudge the issue. I think we have to let everyone, the public, the contractors, everyone who is interested, give public comments on this issue, on what level of indemnification is appropriate, as well as other related issues, and then I think we can come out with a policy that applies to all of our contractors.

One thing I was concerned with as we got into negotiations with an individual contractor was that to try to go into bilateral negotiations with an individual contractor and tell that contractor that all of a sudden we have gotten really tough here, we are going to give you a whole lot less than we give everybody else, just does not fly.

I think we have to do it on an across-the-board basis. We have to apply it to everybody. I think we need to move promptly in this area. I think we have to come up with a balanced approach. I do not think we can say, for example, to contractors, "We know you are in a high risk business but do not expect any indemnification for anything from us," or I think we will have a long list of former DOE contractors.

So I think we have to develop a balanced approach that looks primarily at what the best interest of the Federal Government is, how we can get the best service out of our contractors, how we can encourage them to operate the plants in the most environmentally secure, safest way they can. I think these are our goals, and I expect to move promptly toward a resolution of the issue.

I would be happy to have your comments as we move forward on what you think should go into that notice of proposed rulemaking and how you think we should treat the contractors in this area.

Senator METZENBAUM. What do you see as the timetable? You said next month. That is tomorrow.

Mr. WAKEFIELD. I think we anticipate mid November.

Senator METZENBAUM. When do you see the rulemaking becoming final?

Mr. WAKEFIELD. I would hope that we could come out with a final rule by next spring.

Senator METZENBAUM. Let me say, Mr. Wakefield, that when Admiral Watkins was before us he talked about his wanting to make contractors responsible. Now you do that in one of two ways. One is with a rulemaking, and the second is by reluctance to sign contracts that provide for indemnification. Every time you sign a new contract, it is a question of what goes into it, with or without a rule. You do not need a rule for everything that is in a contract.

What steps have been taken by the Department since the Admiral took over on the issue to which he addressed himself voluntarily when he was before us for confirmation?

Mr. WAKEFIELD. When you deal with an issue like this, Senator, that affects all of the contracts, you really need to do it on a department-wide basis rather than on a contract-by-contract basis. Under the law we need to change our regulations.

These contracts only come up for renegotiation every five years, so we have not had very many major ones that did come up.

Now when we brought EG&G in to operate the plant at Rocky Flats, they in effect stepped into a contract that Rockwell was just 1 year into. So under the terms of the contract, there was another 4-plus years to run.

Senator METZENBAUM. You did not have to give them the whole four years. You could have given them an interim one-year contract.

Mr. **Wakefield**. What we negotiated with EG&G on this point was that when we did come up with new department-wide rules regarding indemnification, we would sit down with them and renegotiate that part of the agreement that was affected by our rulemaking.

Senator **Metzenbaum**. That is in the contract?

Mr. **Wakefield**. Yes.

Senator **Metzenbaum**. Just last week GAO documented how Rockwell was awarded $27 million in bonuses during their trouble-plagued years running Rocky Flats. Earlier in the year it had been reported the FBI and the EPA were conducting an investigation of the Fernald facility for potential violations of the law.

Can you now guarantee to the Members of this committee that if the FBI or the EPA fines the operators of Fernald that DOE absolutely will not pay for these fines directly or indirectly through award fees or bonuses?

Mr. **Wakefield**. As far as award fees or bonuses are concerned, Senator Metzenbaum, I believe from the period starting with November 1, 1989 of this year on, which was the earliest we could move on this point, award fees will be tied to the environmental performance of the contractor, and if the contractor gets a failing grade, if he does not perform satisfactorily in the environmental, safety or health area, his entire award fee is at risk.

That was not the case in the past. You mentioned the Rocky Flats situation. We were not able to give the contractor a zero award fee under the prior award fee system as it then existed. We have changed that starting with the period beginning November 1, 1989. Bad environmental performance, no award fee.

Senator **Metzenbaum**. I appreciate your response, but the fact is it does not answer my question.

I am asking can you now guarantee the Members of this committee that if the FBI or the EPA fines the operators of Fernald that you will not pay for those fines either directly or indirectly?

Mr. **Wakefield**. I am sorry. I thought you asked in the context of an award fee.

Senator **Metzenbaum**. I did say through award fees or bonuses. You are right about that. So I guess I will just put the question mark at the end of whether you would pay them directly or indirectly.

Mr. **Wakefield**. In the context of indemnification, that will be a matter of what the contract provides. We are bound by the signed contract. Prospectively, we expect to deal with this in our proposed rulemaking, and that is an issue that is of very much concern to us. For example, fines and penalties that we may assess under Price-Anderson I do not anticipate will be reimbursed by the Department.

Senator **Metzenbaum**. And others?

Mr. **Wakefield**. I think that is going to be a subject of the proposed rulemaking, and I would hesitate right now to prejudge the outcome of that.

Senator **Metzenbaum**. Since Admiral Watkins came into office, have you signed any new 5-year management contracts?

Mr. **Wakefield**. No, I do not believe so; not a major one.

Senator **Metzenbaum**. Do you anticipate that any will be signed before you conclude the rulemaking?

Mr. **Wakefield**. If any are signed, it would be our intention that we include a provision to the effect that it will be subject to change depending upon the outcome of that rulemaking.

Senator **Metzenbaum**. So those contracts will be protected with respect to——

Mr. **Wakefield**. That is our objective, Senator.

Senator **Metzenbaum**. Senator Wirth indicated in 1986 it was reported that DOE planned to notify and offer medical monitoring to thousands of workers exposed to beryllium at weapons facilities in the 1940's and 1950's. In 1988 at his confirmation hearing, the Assistant Secretary for Environment, Safety and Health indicated that DOE was still committed to undertake in the notification of beryllium workers.

It is now nearly 3 years since the first reports of this notification effort, and as far as I know the workers have not as yet been notified. I do not understand the justification to take more than 3 years. The workers are at grave risk, and time is of the essence.

When will the notification program occur?

Mr. **Wakefield**. Senator, I am sorry. I am not familiar with that issue. I will be glad to get an answer and provide it for the record for you.

Senator **Metzenbaum**. Would you be good enough to see to it that within the next week I get a letter from the Department detailing the current status of the notification program for beryllium workers and the specific steps with which DOE intends to complete the program?

Mr. **Wakefield**. I will, Senator.

Senator **Metzenbaum**. I would appreciate that very much.

[The information referred to follows:]

Department of Energy
Washington, DC 20585

November 16, 1989

The Honorable Howard Metzenbaum
United States Senate
Washington, D.C. 20510

Dear Senator Metzenbaum:

This responds to your request, made during my appearance before the Senate Energy Committee hearing on October 31, 1989, that I provide you with the current status of the notification program for beryllium workers.

Admiral Watkins shares your concern about the potential adverse health effects associated with exposure to beryllium.

The Department currently monitors for beryllium disease during its routine medical examinations at its facilities. In addition, former employees who believe they have symptoms consistent with exposure to beryllium can request the Department to conduct the appropriate diagnostic tests to confirm or deny the presence of beryllium disease.

It is evident, however, that a more aggressive approach is needed and we are looking at different mechanisms to do this. The Department will have a final answer by January 31, 1990.

Sincerely,

Stephen A. Wakefield
General Counsel

SAW:ccw

Senator METZENBAUM. I have been informed that the Inspector General sent an investigatory team to Fernald yesterday. Can you tell us why that team is there and what they are looking for that was not covered by the tiger team, when were the Westinghouse managers informed about this team's investigation, and was the FBI part of that investigation?

Mr. WAKEFIELD. I am not aware of the specifics of the Inspector General's visit. I have not heard any indication that the FBI was involved in it, Senator.

Senator METZENBAUM. Do you know what they are looking for?

Mr. WAKEFIELD. I do not. The Inspector General does not notify me of what he intends to do, but after he has made his findings he will frequently run them by me for my comment. I have no control over the Inspector General. He does not report to me or does not tell me what his plans are.

Senator METZENBAUM. You do not know whether Westinghouse was notified in advance?

Mr. WAKEFIELD. I am certainly not aware that they were, no, sir.

Senator METZENBAUM. Mr. Holmes, the DOE employee health data which covers 600,000 workers is the largest, most important data set available on the health effects of low radiation. I believe it is imperative that these data are utilized effectively in the formulation of public and occupational health policy.

In your estimation, are the DOE's health study's research findings being effectively translated into public health policy; and if so, in what manner?

Mr. HOLMES. I would like to be able to give you an answer to that, but we turn to HHS for their evaluation of this. I cannot give you an answer. I will get one for the record.

Senator METZENBAUM. Will you get one for us within the next week or ten days, please?

Mr. HOLMES. I will do my best.

Senator METZENBAUM. Thank you.

The CHAIRMAN. Senator Metzenbaum, I hesitate to call time on you because I have not on others, but I do remind you and Senator Domenici that we have two more panels between now and 12:30.

Senator METZENBAUM. Mr. Chairman, you have been very considerate of Members. I do have additional questions, and we will submit them in writing in an effort to cooperate with your leadership.

The CHAIRMAN. Thank you very much, Senator Metzenbaum.

Senator Domenici.

Senator DOMENICI. Thank you, Mr. Chairman. I have only two questions. My first question is to whichever of you who feels most comfortable in answering.

Two months ago the Nation heard about the investigation of Rocky Flats for potential criminal activity in violating criminal statutes. While I think all of us understand the nature of a criminal proceeding in that there is not a lot of talk about something that is under investigation, I wonder if anyone is prepared to give us at least a current statement or status report as to when that investigation might reach the point where the government is going to proceed, where it has been concluded and we know what the activities that took place there are all about and that the matters under investigation will be made public?

Does anybody know when that is going to occur?

Mr. **Stewart**. Senator, I think that issue was raised earlier this morning. As I responded, we cannot give a timetable. We are proceeding just as expeditiously as we can. I am going out to Denver actually tomorrow to meet with the U.S. Attorney there to review the status of the matter. All I can say at this point is that we are pressing ahead. It is a large facility. It is complex. There is enormous documentation.

I would also add, as Mr. Wakefield stated earlier, that the Attorney General has undertaken to give Admiral Watkins any information about new serious public health concerns that arise during the course of the investigation.

Senator **Domenici**. Mr. Wakefield, my recollection and the numbers that I have been given would indicate that even though we are in a sequestered mode up here and we have not gotten all the appropriation bills through, the one bill that was signed by the President is the Energy and Water Appropriation Bill. If our numbers are right, we have given the Department all they asked for and more with reference to commencing the five-year cleanup plan for nuclear waste facilities and for defense facilities around the country.

My numbers are that we have given you $1.9 billion to start the five-year plan. It is spread in different parts of the Department's budget, but I wonder if you could briefly, because we do not have very much time, tell us if you are having any problems in implementing and getting that process started?

The Secretary indicated very strongly that he wanted the best science around as part of putting that master plan together and that this was a science and research activity as well as a cleanup activity. He also indicated that he intended to use the expertise of the National Laboratories where he could, and I understand that many have responded, asking that they be considered as part of the cumulative body of experts around this country to put together this plan.

What are the principal difficulties the Department is having; where is the plan going; and are you optimistic that with this $1.9 billion you can actually get this five-year plan started in a real way with the very best expertise in the country available?

Mr. **Wakefield**. I think the single biggest problem that we are facing is the ability to attract and pay for the kind of talent that we really need, because our salary structure is so much below that which the kind of individual that we really need for this job could make in the private sector. That is a problem that this committee has been very forthcoming on. We hope to get some resolution down the road, but I would say that is our number one problem.

Senator **Domenici**. You mean within the Department itself?

Mr. **Wakefield**. Yes.

Senator **Domenici**. The person or people that you need to oversee and put it together and manage it, you are having difficulty filling those niches? Is that what you are saying?

Mr. **Wakefield**. Yes. That is a problem throughout the Department, Senator Domenici, at all the scientific and engineering type levels.

Senator **Domenici**. Well, let us assume that is a major problem and you are working on it.

Can you just briefly tell us how you think that effort is going aside from that issue? Are you optimistic that you can put together the kind of people in the country to give our Congress and the nation the best kind of scientific plan for this cleanup?

Mr. **Wakefield**. This is certainly one of the biggest problems facing this nation. People that are attracted are going to have to be attracted partially for their interest in helping the nation solve one of its biggest problems. If we can attract those people, I think we are headed in the right direction and that we can accomplish this. We can get it off the ground and go.

The bill that Senators Johnston and McClure have introduced addresses one important issue, which is to get us another Assistant Secretary to handle the waste management and environmental restoration area. That would be another very helpful thing that this committee can assist in.

Senator **Domenici**. Thank you, Mr. Chairman.

The **Chairman**. Thank you, Senator Domenici.

Gentlemen, thank you very much. You have been an excellent panel. There are a number of other questions to be answered in writing.

Mr. Stewart, you made a very good suggestion in your statement which I did not get around to as to prioritizing those places that need to be cleaned up, and I will ask you in writing to tell us how you would identify and implement that process. I think it is a very good suggestion, and I think we ought to incorporate it but we did not have time to deal with it.

So we will ask questions in writing from any Members who wish to and specifically from me.

Thank you very much for your testimony.

Our next witness is George Merrick. He is Vice President of Aerospace Technologies and Systems Safety with Rockwell International Corporation from El Segundo, California.

Thank you very much for being here, Mr. Merrick. You may please proceed.

STATEMENT OF GEORGE B. MERRICK, VICE PRESIDENT, AEROSPACE TECHNOLOGIES AND SYSTEMS SAFETY, ROCKWELL INTERNATIONAL CORP.

Mr. **Merrick**. My name is George Merrick. I am here in response to your invitation to answer your questions regarding environmental compliance and related issues at the Department of Energy's Rocky Flats plant which Rockwell has managed for DOE since 1975. We have recently agreed with DOE to terminate our management role effective January 1, 1990.

While my duties do not involve the day-to-day operations of the plant, I have in recent months become familiar with many of the issues raised regarding the plant. I will do my best to answer all your questions. If I cannot fully answer any questions today, I will, if the committee wishes, submit a written response at a later time. I appreciate this opportunity to make an opening statement.

After his appointment as Secretary of Energy, Admiral Watkins reversed longstanding DOE policy and placed primary emphasis on environmental compliance instead of on production of nuclear weapons. Admiral Watkins said before this committee on October 5 that, "For too long, the underlying management and operating philosophy within DOE was that adequate production of defense nuclear materials and a healthy, safe environment were incompatible objectives."

He also stated that DOE management shortcomings are the root cause of the environmental safety problems facing the nuclear weapons plants today.

We applaud and support the Secretary's efforts to change the DOE's "production first" culture. When the full record of our management of Rocky Flats is examined, it will show that Rockwell has done an excellent job of protecting health, safety and the environment in spite of DOE funding limitations. The full record will show that Rockwell requests for funding of environmental projects were frequently turned aside by DOE.

We are proud of our people and our record at Rocky Flats. We know that they are ready, willing and able to meet whatever challenge the Department of Energy sets because they have always met the goals set by DOE in the past. There can be little doubt DOE recognizes that because it clearly supports retaining almost all our employees as the operating contract is transferred to another company.

Setting new goals is only the first step. Goals must be accompanied by reasonable plans and consistent methods. At Rocky Flats the actions of the government have not been and are not reasonable or consistent. It is wise for the government to admit its mistakes and change its policies, but it is not reasonable to threaten people with prosecution who follow the government's policy in good faith.

It is neither fair nor consistent for one agency of the government to insist that a company continue to perform a contract while other agencies of the government threaten that company with criminal prosecution for operations essential to contract performance.

Finally, it is not reasonable or consistent to have separate agencies pursuing separate agendas and refusing to act together to achieve constructive solutions.

All these things have happened to Rockwell at Rocky Flats.

As you know, the government began its investigation of the Rocky Flats plant with a search warrant. As we investigated the allegations in the search warrant affidavit, we determined the sensational allegations were unfounded, but we also determined that three specific actions or processes which are a necessary part of weapon production are alleged by the government to be in violation of the law.

We quickly brought this dilemma to the attention of the highest levels of DOE. They told us that if we stopped production they would have to declare it to be a breach of contract. This would subject us to risks of civil damage and could prevent other parts of the government from doing business with us.

We then sought an assurance from the Justice Department and the EPA that if we continued weapons production we would not be prosecuted for these three specific items which are required on an ongoing basis by the production demanded of us by DOE under our contract. To be clear, we sought that assurance for prospective conduct, not for past conduct.

Their response was that if certain conditions which are beyond our control were met, then the general policy of the Justice Department would be not to prosecute. That is clearly equivocal, and no responsible contractor could properly be expected to rely on it. In fact, the author of that response, Attorney General Stewart, who was here earlier, when testifying before Congressman Luken's subcommittee on October 5, explained his belief that this response would not prevent the Justice Department from prosecuting Rockwell in those three areas.

We then tried to obtain relief in the courts. We sued the Departments of Justice and Energy and the EPA to try to get the government to act consistently. The government has never denied that it is insisting that we continue operations which part of the government considers to be criminal.

While we have been engaged in this process, the DOE and the EPA entered into a compliance agreement on one of the three issues we raised. We were now a party——

Senator JOHNSTON. Let me interrupt you at this time. I think all of us have read your statement now, and since time is limited I would like to move to questions if that is all right.

Mr. MERRICK. Let me make one statement.

The CHAIRMAN. Sure.

Mr. MERRICK. We have so stated in the written statement that we think the legislation that you, Mr. Chairman and Senator McClure, have proposed is an excellent framework for solving some of these problems. I think we have tried to kind of do that almost on our own in a variety of ways on every avenue that we have considered to be appropriate and have not been successful to date.

I might add we are still the operating contractor of that plant and will be so at least for the next three months. We still feel as if we are under the gun.

[The prepared statement of Mr. Merrick follows:]

UNITED STATES SENATE
COMMITTEE ON ENERGY AND NATURAL RESOURCES

STATEMENT OF: GEORGE B. MERRICK
VICE PRESIDENT - ROCKWELL INTERNATIONAL CORPORATION

OCTOBER 31, 1989

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

MY NAME IS GEORGE MERRICK AND I AM VICE PRESIDENT - AEROSPACE TECHNOLOGIES & SYSTEMS SAFETY OF ROCKWELL INTERNATIONAL CORPORATION. I AM HERE IN RESPONSE TO YOUR INVITATION TO ANSWER YOUR QUESTIONS REGARDING ENVIRONMENTAL COMPLIANCE AND RELATED ISSUES AT THE DEPARTMENT OF ENERGY'S ROCKY FLATS PLANT, WHICH ROCKWELL HAS MANAGED FOR DOE SINCE 1975. WE HAVE RECENTLY AGREED WITH DOE TO TERMINATE OUR MANAGEMENT ROLE EFFECTIVE JANUARY 1, 1990.

WHILE MY DUTIES DO NOT INVOLVE THE DAY TO DAY OPERATIONS OF THE PLANT, I HAVE IN RECENT MONTHS BECOME FAMILIAR WITH MANY OF THE ISSUES RAISED REGARDING THE ROCKY FLATS PLANT. I WILL DO MY BEST TO ANSWER ALL YOUR QUESTIONS. IF I CAN'T FULLY ANSWER ANY QUESTION TODAY, I WILL, IF THE COMMITTEE WISHES, SUBMIT A WRITTEN RESPONSE AT A LATER TIME. I THANK YOU FOR THE OPPORTUNITY TO MAKE THIS OPENING STATEMENT.

AFTER HIS APPOINTMENT AS SECRETARY OF ENERGY, ADMIRAL WATKINS REVERSED LONG STANDING DOE POLICY AND PLACED PRIMARY EMPHASIS ON ENVIRONMENTAL COMPLIANCE INSTEAD OF ON PRODUCTION OF NUCLEAR WEAPONS. ADMIRAL WATKINS SAID BEFORE THIS COMMITTEE, ON OCTOBER 5, 1989, THAT "FOR TOO LONG, THE UNDERLYING MANAGEMENT AND OPERATING PHILOSOPHY WITHIN DOE WAS THAT ADEQUATE PRODUCTION OF DEFENSE NUCLEAR MATERIALS AND A

HEALTHY, SAFE ENVIRONMENT WERE INCOMPATIBLE OBJECTIVES." HE ALSO STATED THAT DOE MANAGEMENT SHORTCOMINGS ARE THE "ROOT CAUSE" OF THE ENVIRONMENTAL AND SAFETY PROBLEMS FACING THE NUCLEAR WEAPONS PLANTS TODAY.

WE APPLAUD AND SUPPORT THE SECRETARY'S EFFORTS TO CHANGE DOE'S "PRODUCTION FIRST" CULTURE. WHEN THE FULL RECORD OF OUR MANAGEMENT OF THE ROCKY FLATS PLANT IS EXAMINED, IT WILL SHOW THAT ROCKWELL HAS DONE AN EXCELLENT JOB OF PROTECTING HEALTH, SAFETY, AND THE ENVIRONMENT IN SPITE OF DOE FUNDING LIMITATIONS. THE FULL RECORD WILL SHOW THAT ROCKWELL REQUESTS FOR FUNDING OF ENVIRONMENTAL PROJECTS WERE FREQUENTLY TURNED ASIDE BY DOE.

WE ARE PROUD OF OUR PEOPLE AND OUR RECORD AT ROCKY FLATS. WE KNOW THAT THEY ARE READY, WILLING AND ABLE TO MEET WHATEVER CHALLENGE THE DEPARTMENT OF ENERGY SETS BECAUSE THEY HAVE ALWAYS MET THE GOALS SET BY DOE IN THE PAST. AND THERE CAN BE LITTLE DOUBT DOE RECOGNIZES THAT BECAUSE IT CLEARLY SUPPORTS RETAINING ALMOST ALL OUR EMPLOYEES AS THE OPERATING CONTRACT IS TRANSFERRED TO ANOTHER COMPANY.

SETTING NEW GOALS IS ONLY THE FIRST STEP. GOALS MUST BE ACCOMPANIED BY REASONABLE PLANS AND CONSISTENT METHODS. AT ROCKY FLATS, THE ACTIONS OF THE GOVERNMENT ARE NOT REASONABLE OR CONSISTENT.

IT IS WISE FOR THE GOVERNMENT TO ADMIT ITS MISTAKES AND CHANGE ITS POLICIES. BUT IT IS NOT REASONABLE TO THREATEN PEOPLE WITH PROSECUTION WHO FOLLOWED THE GOVERNMENT'S POLICY IN GOOD FAITH. IT IS NEITHER FAIR NOR CONSISTENT FOR ONE AGENCY OF THE GOVERNMENT TO INSIST THAT A COMPANY CONTINUE TO PERFORM A CONTRACT, WHILE OTHER AGENCIES OF THE GOVERNMENT THREATEN THAT COMPANY WITH CRIMINAL PROSECUTION FOR OPERATIONS ESSENTIAL TO CONTRACT PERFORMANCE. AND, FINALLY, IT IS NOT REASONABLE OR CONSISTENT TO HAVE SEPARATE AGENCIES PURSUING SEPARATE AGENDAS AND REFUSING TO ACT TOGETHER TO ACHIEVE CONSTRUCTIVE SOLUTIONS. ALL OF THESE THINGS HAVE HAPPENED TO ROCKWELL AT ROCKY FLATS.

AS YOU KNOW, THE GOVERNMENT BEGAN AN INVESTIGATION OF THE ROCKY FLATS PLANT WITH A SEARCH WARRANT. AS WE INVESTIGATED THE ALLEGATIONS IN THE SEARCH WARRANT AFFIDAVIT, WE DETERMINED THE SENSATIONAL ALLEGATIONS WERE UNFOUNDED. BUT WE ALSO DETERMINED THAT THREE SPECIFIC ACTIONS OR PROCESSES WHICH ARE A NECESSARY PART OF WEAPONS PRODUCTION ARE ALLEGED BY THE GOVERNMENT TO BE IN VIOLATION OF LAW.

WE QUICKLY BROUGHT THIS DILEMMA TO THE ATTENTION OF THE HIGHEST LEVEL OF DOE. THEY TOLD US THAT IF WE STOPPED PRODUCTION THEY WOULD DECLARE IT TO BE A BREACH OF CONTRACT. THIS WOULD SUBJECT US TO RISKS OF CIVIL DAMAGES AND COULD PREVENT OTHER PARTS OF THE GOVERNMENT FROM DOING BUSINESS WITH US.

We then sought an assurance from the Justice Department and the EPA that if we continued weapons production, we would not be prosecuted for these three specific items, which are required, on an ongoing basis, by the production demanded of us by DoE under our contract. To be clear, we sought that assurance for prospective conduct and not past conduct. Their response was that if certain conditions, which are beyond our control, were met, then the "general policy" of the Justice Department would be not to prosecute. That is clearly equivocal, and no responsible contractor could properly be expected to rely on it. In fact, the author of that response, Assistant Attorney General Richard Stewart, when he testified before Congressman Luken's subcommittee on October 5, 1989, explained his belief that this response would not prevent the Justice Department from prosecuting us in those three areas.

We then tried to obtain relief in the courts. We sued the Departments of Justice and Energy and the EPA to try and get the government to act consistently. The government has never denied that it is insisting that we continue operations that part of the government considers criminal. Instead, the government is fighting our lawsuit with technicalities. For example, even though we were directed to continue production by the highest level of the DoE, the government argued that we failed to get that direction from the "contracting officer". This is like saying you took your problem to the general when

YOU SHOULD HAVE GONE TO THE SERGEANT. THEN, WHEN WE PROMPTLY TOOK THIS ISSUE TO THE CONTRACTING OFFICER, HIS RESPONSE WAS A REQUEST FOR INFORMATION, ALMOST ALL OF WHICH WE HAD GIVEN TO DoE WEEKS OR MONTHS EARLIER.

WHILE WE HAVE BEEN ENGAGED IN THIS PROCESS, THE DoE AND THE EPA ENTERED INTO A COMPLIANCE AGREEMENT ON ONE OF THE THREE ISSUES WE RAISED. WE WERE NOT A PARTY TO THIS AGREEMENT. THE AGREEMENT CONTAINS LANGUAGE WHICH GIVES SOME PROTECTION FROM PROSECUTION TO DoE EMPLOYEES, BUT NOT ROCKWELL EMPLOYEES. FURTHERMORE, THE EPA RECOGNIZED THAT THE TECHNOLOGY TO SOLVE ALL OF THE PROBLEMS DOES NOT EVEN EXIST. ONE PART OF THE GOVERNMENT CONTINUES TO THREATEN US WITH PROSECUTION FOR A PROBLEM WHICH OTHER PARTS OF THE GOVERNMENT ADMIT CAN'T BE SOLVED.

OUR EFFORTS TO RESOLVE THESE THREE SPECIFIC PROBLEMS HAVE BEEN LABELED BY SOME AS AN ATTEMPT TO OBTAIN IMMUNITY. THAT IS JUST PLAIN WRONG. WE ASKED FOR NO GUARANTEES REGARDING OUR ACTIONS IN THE PAST. WHAT WE HAVE ASKED FOR IS THE SIMPLE ASSURANCE THAT THE GOVERNMENT WON'T PROSECUTE US FOR THREE SPECIFIC THINGS WE HAVE TO DO TODAY, AND THAT WE MUST CONTINUE TO DO IN THE FUTURE, IN ORDER TO FULFILL A GOVERNMENT CONTRACT.

WE HAVE SEEN PRESS REPORTS OF THE TESTIMONY OF DEPUTY SECRETARY HENSON MOORE, BEFORE THIS COMMITTEE, TO THE EFFECT

THAT WE SOUGHT A PRESIDENTIAL EXECUTIVE ORDER TO IMMUNIZE US FROM PROSECUTION. WE FEAR THAT THESE PRESS REPORTS PORTRAY AN INACCURATE VIEW OF OUR DISCUSSIONS ON THIS SUBJECT. WE SUGGESTED THAT AN EXECUTIVE ORDER WAS ONE POSSIBLE METHOD THAT WOULD ALLOW CONTINUED PRODUCTION THAT IS ESSENTIAL TO NATIONAL SECURITY WITHOUT EXPOSING US TO ADDITIONAL RISKS OF PROSECUTION FOR PROSPECTIVE CONDUCT. WE NEVER SUGGESTED AN EXECUTIVE ORDER THAT WOULD APPLY TO PAST ACTIONS. WE WERE LOOKING FOR A WAY TO GO FORWARD, TO CONTINUE IN THE FUTURE WITHOUT EXPOSING OUR PEOPLE AND OUR COMPANY TO ADDED RISK FOR FUTURE CONDUCT.

WE AT ROCKY FLATS FIRMLY BELIEVE THAT WE HAVE ALWAYS OPERATED THE PLANT SAFELY AND LEGALLY. THE ENVIRONMENTAL PROBLEMS AT THE PLANT THAT NEED RESOLUTION ARE LONG STANDING AND WELL KNOWN. ALMOST ALL OF THEM RESULT FROM ACTIONS TAKEN BEFORE WE BECAME THE OPERATING CONTRACTOR. NONE OF THESE PROBLEMS POSE AN IMMINENT HEALTH RISK. THEY ARE BEING ADDRESSED AND MUST CONTINUE TO BE ADDRESSED IN THE FUTURE.

OTHER PROBLEMS HAVE BEEN THE SUBJECT OF INTER-AGENCY LEGAL DISPUTES FOR YEARS. FOR EXAMPLE, WHICH AGENCY REGULATES WHICH TYPE OF WASTE AND WITH WHICH SET OF REGULATIONS MUST THE PLANT COMPLY. THERE MUST BE SOME WAY TO RESOLVE THESE PROBLEMS WITHOUT THREATENING COMPANIES AND THEIR EMPLOYEES WITH CIVIL AND CRIMINAL LITIGATION FOR DOING NO MORE THAN FOLLOWING FORMER GOVERNMENT POLICY AND DIRECTION IN GOOD FAITH. IT IS

NOW CLEAR TO US THAT THE AGENCIES OF THE EXECUTIVE BRANCH ARE UNWILLING TO WORK TOGETHER TO SOLVE THIS PROBLEM.
WE HAD PREVIOUSLY SUGGESTED TO VARIOUS AGENCIES OF THE GOVERNMENT THAT THEY SEEK CONGRESSIONAL ACTION TO HELP RESOLVE THIS PROBLEM. WHAT WE SUGGESTED, AND WHAT THIS SITUATION CALLS FOR, IS A FAIR, ORDERLY, AND EFFECTIVE METHOD OF GETTING TO THE RESULT WE ALL WANT. DOE, EPA, THE STATE AUTHORITIES, AND THE OPERATING CONTRACTORS SHOULD BE REQUIRED TO IDENTIFY ALL THE PROBLEMS FACED AT EACH LOCATION. THE PARTIES SHOULD THEN AGREE ON A REASONABLE SOLUTION TO EACH PROBLEM INCLUDING A REASONABLE TIME TABLE. THESE PLANS SHOULD BE INCORPORATED INTO A BINDING AGREEMENT. CRIMINAL PROSECUTION SHOULD BE RESERVED FOR THOSE WHO DELIBERATELY ENDANGER THE HEALTH AND SAFETY OF WORKERS OR THE COMMUNITY, OR THOSE WHO KNOWINGLY AND WILLFULLY VIOLATE THE AGREEMENT.

THIS COULD BE ACHIEVED IF THE GOVERNMENT AGENCIES WERE WILLING TO WORK TOGETHER. SINCE THEY HAVE YET TO DEMONSTRATE A WILLINGNESS TO ACT SENSIBLY, WE SUGGEST THAT IT IS TIME FOR CONGRESSIONAL ACTION. MR. CHAIRMAN, THE BILL INTRODUCED BY YOU AND SENATOR MCCLURE HITS THE NAIL RIGHT ON THE HEAD.
WE THINK OUR COMPANY AND PARTICULARLY OUR EMPLOYEES HAVE BEEN TREATED UNFAIRLY BY THE GOVERNMENT. WE HOPE THAT AT A MINIMUM THE GOVERNMENT CAN LEARN FROM THESE MISTAKES AND NOT REPEAT THEM. WE THINK THAT THE CONCEPT ARTICULATED IN SECTION 805 OF YOUR BILL IS LONG OVERDUE. IT INCORPORATES WHAT WE HAVE BEEN

TRYING TO OBTAIN FROM THE EXECUTIVE BRANCH. IT SETS FORTH A FAIR AND REASONABLE MECHANISM TO IMPLEMENT A NEW DIRECTION IN GOVERNMENT POLICY. IT RECOGNIZES THE GOVERNMENT'S OBLIGATION TO DEAL FAIRLY WITH THOSE WHO HAVE SERVED THE GOVERNMENT BY FOLLOWING ITS DIRECTIONS IN THE PAST. WE WHOLEHEARTEDLY SUPPORT SENATE BILL 1802 AND URGE ITS IMMEDIATE PASSAGE.

The **Chairman**. Frankly, I appreciate very much your being here, Mr. Merrick. I know that it was with some hesitancy you came up to sort of be beat up on by the Congress again. I think you have done that before.

Your testimony is very important to us in understanding the situation and helping us devise a solution to it.

First of all, you state in your statement that the environmental problems at the plant are longstanding and well known, and none of these problems pose an imminent health risk. I think you were here earlier when we questioned these other witnesses about the health risk or lack thereof.

Mr. **Merrick**. Yes.

The **Chairman**. Would you explain what you mean by no imminent health risk?

Mr. **Merrick**. It is our understanding that the kind of difficulties that exist at the plant do not manifest themselves in a risk today.

The monitoring that goes on with respect to any effluent that leaves that facility, whether it be groundwater or air, is extensive.

I would say that in some of the testimony it almost sounds like EPA was a new word to the complex. We have been working with the EPA and the RCRA process for a good many years fundamentally for hazardous material. We have many, many permits. We have gone through that process and have been very conscientious along with the DOE. It is not just Rockwell doing it. In fact, we are doing it fundamentally in response to DOE's requirements.

It has not been discussed, but the handling of nuclear residue and nuclear waste is very well controlled. The controls happen to be slightly different than the kinds of things that the EPA are concerned about, so the only real conflict came when we got into the question of mixed waste and who was going to take care of that. So now as far as we are concerned, we had kind of a conflict between the DOE and EPA.

It is like it was all a new religion, and that is not true at all. We have been working this problem for years, and that is why we feel comfortable in saying there are no health hazards in that facility. That problem has been worked, and we are hard at it. We struggle with the issue of how material is stored and how it is kept track of and the permits that are required by EPA. As I say, it is not new to us. We have been doing that for a long time.

The **Chairman**. Would you tell us about the Catch 22 of saying on one hand you must operate the plant or otherwise you will be in breach of contract and yet, on the other hand, you are unable to comply, just an example of things that——

Mr. **Merrick**. One of the examples we talked about today, the land ban waste issue. That is the kind of stuff that says if you generate this kind of waste and you have no place to put it or no treatment process whereby you can remove the hazardous material from this waste, this being mixed waste, then that is a violation of that EPA regulation. You are not supposed to do that. We all understand that.

In the contract, if we operate the facility and continue with the production process of nuclear weapon components, we generate that mixed waste. There is no way to get around it. It is the stuff that you described. It is the glovebox material where you are machining and getting solvents. You get a combination of waste. There is no way to treat it, and that is against the law. You cannot do that.

So that is as simple a way that I can put the Catch 22. On one hand we have to continue to operate under our production contract with DOE——

The CHAIRMAN. This is the kind of waste that cannot be incinerated or otherwise disposed of except by disposal in a repository somewhere?

Mr. MERRICK. Fundamentally, that is correct. That is the ultimate solution.

The CHAIRMAN. The repository is not ready?

Mr. MERRICK. The fundamental issue is storage. Once we get storage, you do not get out of that Catch 22.

The CHAIRMAN. You described in your statement in the negotiations with the Justice Department they were not willing to say that you were insulated from good faith violations of the law made necessary by an inability to comply with the law?

Mr. MERRICK. That is correct.

The CHAIRMAN. Have you read the legislation carefully?

Mr. MERRICK. I have read the summaries.

The CHAIRMAN. We talk about environmental laws. Is there an understanding of what constitutes environmental laws? Do you see any problem there?

Mr. MERRICK. The difficultly we have had is the application of whether the DOE is in control or whether the EPA is in control. That is fundamentally where we have gotten into this problem with the mixed waste.

It is pretty clear with radioactive material, and it is reasonably clear with the hazardous. When you get them together, that is a problem.

We also have a conflict with regard to waste and residue. We have residue on the facility that we expect to process in the future. It is not waste. It is very valuable material. It does contain an amount of plutonium to be recovered for future use.

There can be conflicts of interpretation about what degree is economically recoverable, what should be considered waste and what should be considered residue for future processing. It is not a black and white thing about the law and what should be applied.

The CHAIRMAN. Let me ask you one final question. We want advice here for the next contractor. You are gone. From your point of view, are State laws and the lack of clarity or application of State laws a problem, or would they be for the next contractor?

Mr. MERRICK. That is not my understanding. We have had, again, many environmental kind of agreements, tri-party agreements where the DOE and the state and Rockwell have signed agreements about how to handle certain materials. I do not think we have had any ambiguities in that regard.

The CHAIRMAN. Thank you.

Senator McClure.

Senator MCCLURE. I have no questions. Thank you.

Senator DOMENICI. I just wanted to clarify on Senator Johnston's question with reference to the Catch 22 and your example that if you continue to produce, the weapon activity causes a waste that you say has to be disposed of in a certain way, and if that is not being done you are in violation of the law on this side, but you are being told to continue.

Who has the responsibility for disposal of that waste under the arrangement which currently exists?

Mr. MERRICK. It has fundamentally been a DOE issue, and it is just recently that the issues between DOE and EPA have raised their heads about whether that material is subject to the land ban restrictions.

Senator DOMENICI. My question is between you and the Department: Is there any question in your mind that it is not your responsibility to dispose of that? I gather that is what you are telling us. That is somebody else's responsibility?

Mr. MERRICK. Between Rockwell and the Department or the contractor and the Department, there is no question in my mind. We are implementing the instructions that we get from DOE.

Senator DOMENICI. Has DOE ever suggested that you have that responsibility, or have they just said you must continue to produce?

Mr. MERRICK. No, they have never really said we have that responsibility. We have the responsibility to follow their instructions.

Senator DOMENICI. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much, Senator Domenici.

Mr. Merrick, we appreciate your testimony very much. Thank you.

Our final panel today will be two labor union representatives, Mr. Leo Zeferetti, Legislative Director for the Building Trades; and Mr. David L. Mallino, Director of Legislation for the AFL-CIO Industrial Union Department.

Mr. Zeferetti, if you will please lead off.

STATEMENT OF ROBERT GEORGINE, PRESIDENT, BUILDING AND CONSTRUCTION TRADES DEPARTMENT, AFL-CIO, AS PRESENTED BY LEO ZEFERETTI

Mr. ZEFERETTI. Thank you, Mr. Chairman, and thank you, Members of the committee, for giving us the opportunity to testify. I am testifying in place of President Robert Georgine, who could not be here this morning. I have a condensed version of the testimony that he submitted, and I would like to read it, Mr. Chairman.

The CHAIRMAN. Yes.

Mr. ZEFERETTI. The Building and Construction Trades Department represents 15 international unions with over 4 million members. Our members are not strangers to the nuclear industry. They have been an integral part of the nuclear weapons industry for the past 45 years. Their labor produced the facilities at Savannah River, Rocky Flats, Hanford, Fernald and the other sites throughout the Nation. Regarding civilian nuclear power, our members have built and serviced every plant in the Nation as well. They are the workers charged with the cleanup at Three Mile Island and with decommissioning reactors around the country.

In short, our members bring special experience to the nuclear weapons industry like our brothers and sisters in the metal trades and industrial union departments.

A substantial number, nearly 125,000 weapons complex production and research workers who are currently employed in a variety of production, maintenance, construction, clean-up and related work at the Department of Energy laboratories and facilities are represented by affiliates of the Building and Construction Trades Department.

For example, the Building and Construction Trades Department has represented construction and maintenance workers at Savannah River since its inception. The unfortunate fact is that these workers confront many problems on the job each day. There is no question that serious health and safety problems exist in and around the DOE facilities.

Investigations by Congress, the General Accounting Office, Inspector General and the press have documented many questionable health and safety practices throughout the weapons complex. Inattention to basic health and safety issues has resulted in thousands of workers and their families suffering from exposure to radiation and toxic substances in the workplace and in the home through dust and fibers on workers' clothing.

Workplace problems in the weapons complex include antiquated facilities with poor engineering controls, inadequate protective equipment, a lack of basic training, and poor or nonexistent monitoring of workers health and exposures to radiation and toxic substances.

Much information regarding worker health and safety in the weapons complex have been kept secret from Congress, the public and, most important, the workers themselves.

Secretary of Energy Watkins has recognized the flaws in the operation of the weapons complex. In announcing his ten-point plan, Admiral Watkins noted the serious flaws in operating discipline and prevalent philosophy and culture where the production of materials and the healthy safe environment were not compatible goals.

DOE and its predecessor agencies have failed to conduct comprehensive studies under health effects to workers from exposure to radiation and other toxic substances. Uncontrolled and unmonitored releases within the facilities and into the atmosphere have occurred regularly during the past four decades.

At Fernald, monitoring equipment in many instances was simply not functioning.

At Hanford, large amounts of radiation were released into the atmosphere simply to test downwind detection equipment. During these releases, construction workers were subjected to large and unknown amounts of radiation while they worked.

Secretary Watkins has publicly acknowledged DOE's shortcomings regarding worker health studies. Many of the studies that have been conducted suffer from severe credibility because they lack proper investigative techniques and they have not undergone acceptable peer review.

Senator Wirth has introduced S. 972, the Radiation Research Reorganization Act of 1989, which removes the epidemiological research functions for DOE and properly places them in the Department of Health and Human Services.

The exemption under the Occupational Safety and Health Act given to DOE facilities has created an atmosphere where poor health and safety practices have been legion and chronic. The current system of allowing DOE to be its regulator of health and safety practices is fundamentally at odds with DOE's production mandate.

The only way to overcome the history of poor health and safety enforcement at DOE facilities is to have the government's health and safety agency, the Occupational Safety and Health Administration, oversee compliance. OSHA is the government's lead agency in this field and, as such, needs to have a presence at DOE facilities. The penalty and enforcement procedures that OSHA brings to the workplace are the incentive that will create safe working conditions which workers throughout the weapons complex deserve.

DOE has recently included OSHA personnel as part of its tiger teams. The use of OSHA personnel is only in an advisory, not regulatory, capacity.

Legislation introduced by Senator Glenn, S. 1304, the DOE Nuclear Safety Environmental Act, addresses several concerns that the Building Construction Trades Department has regarding the improvement of the DOE weapons complex. Senator Glenn's legislation will create the right of OSHA with its full enforcement powers to inspect DOE facilities.

Four decades of underfunding and inattention to health and safety practices have created a culture of poor health and safety practice and a culture which Secretary Watkins has recognized. The Building and Construction Trades Department applauds Admiral Watkins' changing the DOE award fee system to a 51 percent emphasis on environment, safety and health.

Fundamental changes in the structure of DOE operations are nonetheless necessary. S. 1304 establishes a framework to begin and maintain proper health and safety practices, radiation research and environmental restoration. We urge the committee to act expeditiously on S. 972 and S. 1304 which can create immediate positive effects on the health and safety of workers and the operations of the DOE weapons complex.

We are also encouraged by the introduction of S. 1802 which the Chairman has introduced this past week. That bill also addresses several concerns of the Building and Construction Trades Department regarding improvement of the weapons complex.

Regarding enforcement, adequate numbers and funding of qualified personnel are necessary to ensure a safe workplace. The history of the health and safety practices in the DOE weapons complex has demonstrated that paper enforcement schemes do not work. We urge that legislation include the necessary personnel and resources for proper health, safety enforcement and worker training.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Georgine follows:]

TESTIMONY OF
THE BUILDING AND CONSTRUCTION TRADES DEPARTMENT, AFL-CIO

ROBERT GEORGINE, PRESIDENT

BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES

UNITED STATES SENATE

OCTOBER 31, 1989

Mr. Chairman and members of the Committee I would like to thank you for inviting me to testify before you today on the Department of Energy nuclear weapons complex. My name is Robert Georgine and I am President of the Building and Construction Trades Department, AFL-CIO.

The Building and Construction Trades Department (BCTD) represents 15 international unions with over 4 million members. Our members are not strangers to the nuclear industry. They have been an integral part of the nuclear weapons industry for the past 45 years. Their labor produced the facilities at Savannah River, Rocky Flats, Hanford, Fernald and the other sites throughout the nation. Regarding civilian nuclear power our members have built and serviced every plant in the nation as well. They are the workers charged with the cleanup at Three Mile Island and with decommissioning reactors around the country. In short, our members bring special experience to the nuclear weapons industry like our brothers and sisters in the Metal Trades and Industrial Union Departments.

A substantial number of the nearly 125,000 weapons complex production and research workers who are currently employed in a variety of production, maintenance, construction, cleanup and related work at Department of Energy (DOE) laboratories and facilities are represented by affiliates of the BCTD. For example, the BCTD has represented construction and maintenance workers at Savannah River since its inception.

The unfortunate fact is that these workers confront many problems on the job each day. There is no question that serious health and safety problems exist in and around the DOE facilities. Investigations by Congress, the General Accounting Office, Inspectors General and the press have documented many questionable health and safety practices throughout the weapons complex. Inattention to basic health and safety issues has resulted in thousands of workers and their families suffering from exposure to radiation and toxic substances in the workplace and in the home through dust and fibers on workers' clothing. Workplace problems in the weapons complex include antiquated facilities with poor engineering controls, inadequate protective equipment, a lack of basic training, and poor or nonexistent monitoring of worker health and exposures to radiation and toxic substances. Much information regarding worker health and safety in the weapons complex has been kept secret from Congress, the public and, most important, the workers themselves.

Secretary of Energy Watkins has recognized the flaws in the operation of the weapons complex. In announcing his Ten-Point Plan, Admiral Watkins noted the serious flaws in operating discipline and a prevalent philosophy and culture where the production of materials and a healthy, safe environment were not compatible goals. Within the past two weeks a study of Rocky Flats under a DOE contract concludes that basic calculations to determine the possibility of criticality were missing or seriously flawed in many instances. Complacency and poor communication of potential hazards exist at the site. Furthermore, the study found kilograms of plutonium, having the potential for criticality, in an exhaust ventilation duct outside the filtering system. This discovery directly contradicted claims by plant management that no such accumulations had occurred at Rocky Flats. Poor planning and oversight led to such conditions and workers are the persons forced to bear the burden of these practices. Meanwhile, DOE regularly approved award fees to the contractor while finding that the quality of safety and health practices at Rocky Flats was deteriorating. Last week the GAO reported that notable deficiencies existed in health and safety practices at Rocky Flats as recently as last year. The poor environmental, safety and health practices at Rocky Flats have led to a criminal investigation by the Department of Justice.

DOE and its predecessor agencies have failed to conduct comprehensive studies on the health effects to workers from exposure to radiation and other toxic substances. Uncontrolled and unmonitored releases within the facilities and into the atmosphere have occurred regularly during the past four decades. At Fernald monitoring equipment in many instances was simply not functioning. At Hanford large amounts of radiation were released into the atmosphere simply to test downwind detection equipment. During those releases construction workers were subjected to large and unknown amounts of radiation while they worked. Secretary Watkins has publicly acknowledged DOE's shortcomings regarding worker health studies. Many of the studies that have been conducted suffer from severe credibility problems because they lack proper investigative techniques and they have not undergone acceptable peer review. Senator Wirth has introduced S. 972, The Radiation Research Reorganization Act 1989, which removes the epidemiological research functions from DOE and properly places them in the Department of Health and Human Services. This legislation will allow the appropriate scientific review and necessary peer review to ensure that DOE worker health and epidemiological data are properly maintained and reviewed. The credibility of data concerning DOE workers can only be increased through independent study and peer review.

The exemption under the Occupational Safety and Health Act given to DOE facilities has created an atmosphere where poor health and safety practices have been legion and chronic. The current system of allowing DOE to be its own regulator of health and safety practices is fundamentally at odds with DOE's production mandate. DOE does not have the personnel to ensure adequate health and safety practices. This past July the Department wrote the U.S. House of Representatives Subcommittee on Safety and Health that its Office of Safety, Health and Quality Assurance nas 125 people, 99 being professionals. Of the 125 only 10 are stationed outside the Washington, D.C. headquarters. Furthermore, there are no formal training requirements for inspectors. DOE simply cannot enforce health and safety regulations with these low numbers of people.

Worker health and safety at DOE facilities could be improved substantially by applying and enforcing the standards developed by experts in the field of occupational safety and health. The current system of allowing DOE to enforce safety and health standards has created an atmosphere of lax standard setting and enforcement. For example, in 1988 the GAO found that DOE had given its contractor at Hanford a nine month extension to fully implement asbestos requirements. That extension was not consistent with DOE's own orders which mandated procedures in order to obtain a short-term release from asbestos requirements. Furthermore, neither DOE nor the contractor ensured that actual work procedures complied with asbestos requirements in those areas where no extension had been given. The result of this policy was to subject workers unnecessarily to asbestos exposures at the Hanford tank farms.

The only way to overcome the history of poor health and safety enforcement at DOE facilities is to have the government's health and safety agency the Occupational Safety and Health Administration oversee compliance. OSHA is the government's lead agency in this field and as such needs to have a presence at DOE facilities. The penalty and enforcement procedures that OSHA brings to workplace are the incentive that will create safe working conditions which workers throughout the weapons complex deserve. DOE recently has included OSHA personnel as part of its "Tiger Teams." The use of OSHA personnel is only in an advisory, not regulatory, capacity.

Legislation introduced by Senator Glenn, S. 1304, The DOE Nuclear Safety and Environment Act, addresses several concerns that the BCTD has regarding the improvement of the DOE weapons complex. Senator Glenn's legislation will create the right of OSHA with its full enforcement powers to inspect DOE facilities. Four decades of underfunding and inattention to health and safety practices have created a culture of poor health and safety practice, a culture which Secretary Watkins has recognized. The BCTD applauds Admiral Watkins' changing the DOE award fee system to a 51% emphasis on environment, safety and health. Fundamental changes in the structure of DOE operations are nonetheless necessary. S. 1304 establishes the framework to begin and maintain proper health and safety practices, radiation research, and environmental restoration. We urge the Committee to act expeditiously on S. 972 and S. 1304, which can create immediate, positive effects on the health and safety of workers and the operations of the DOE weapons complex. We also are encouraged by the introduction of S. 1802 late last week by Senator Johnston. That bill also addresses several concerns of the BCTD regarding improvement of the weapons complex. Regarding enforcement, adequate numbers and funding of qualified personnel are necessary to ensure a safe workplace. The history of health and safety practices in the DOE weapons complex has demonstrated that paper enforcement schemes do not work. We urge that legislation include the necessary personnel and resources for proper health and safety enforcement and worker training.

Exposures to toxic substances and the storage of them present significant problems for workers. At Hanford recent revelations indicate that cyanide, added to the waste tanks in order to increase storage capacity, has the potential explosive power of 36 tons of TNT. These are the same tank farms where the asbestos waiver had been granted. At Fernald storage drums and areas have been mislabelled or forgotten through the years. At Rocky Flats poor storage practices have allowed waste to leak into aquifers. Recently, the Environmental Protection Agency has placed both Rocky Flats and Hanford on the Superfund National Priorities List. In May 1988 the Colorado Department of Health found that the contractor at Rocky Flats had failed to train all personnel in required hazardous waste training. It is unconscionable to allow workers to be exposed to these hazards, which are avoidable through proper environmental, safety and health practices.

DOE has recently unveiled its Five-Year Plan for cleaning up the DOE complex. Part of that plan includes commitments to create less waste from DOE facilities. Included in this plan are new technologies and processes for waste minimization. The plan also includes the development of improved environmental restoration technologies. While waste minimization is a worthwhile and necessary goal much of this technology is new and experimental. The cyanide in the Hanford tanks is one example of potential problems with waste minimization. Workers need proper training and awareness of new techniques and processes which may be introduced into the weapons complex during the coming years. Experiments which work well in the laboratory can encounter serious difficulties when deployed on a full-scale basis. In addition to new techniques and processes there will be a need for thousands of additional workers on remediation and decontamination projects throughout the weapons complex. The proper training of these workers is vital in order to avoid future disease and injury because much of this work is as dangerous, if not more so, as current production work. Congress has already mandated specific worker training requirements under the Superfund Amendments and Reauthorization Act of 1986 in order to effectuate proper remediation. DOE must follow the law in order to prevent another generation of workers needlessly exposed to workplace hazards in the weapons complex.

Steps must be taken immediately to begin a program to address the long-term health needs of past, present and future weapons complex workers. It is important that the current and former workers and their families be provided with appropriate baseline health examinations followed by an ongoing surveillance program. For example, last year DOE announced a risk notification program for workers exposed to beryllium, a highly toxic metal with known adverse health effects. It is currently unclear that any progress has been made to implement the program. Meanwhile workers who may need immediate medical attention are unaware of their risk to disease. A comprehensive medical surveillance program must require DOE to develop appropriate mechanisms to have the existing health studies undergo peer review and to develop suitable protocols for new studies, notification and examinations.

In addition to medical surveillance, the establishment of joint labor-management-government committees at each facility in the weapons complex can begin to create and maintain a new culture of operations where health and safety concerns do not take a back seat to production. Joint committees on both the national and local levels are necessary to ensure the safe operation of these facilities. The history of weapons complex operations has proven conclusively that keeping workers in the dark about their own jobs and health does not foster a sense of trust toward the management and operations of the facilities. Joint committees should have the power to review the health and safety policy of a facility and the ability to cease operations at a facility when the committee determines that continued operation is a hazard to the health and safety of the personnel. Through the establishment of labor-management-government cooperation committees, safe workplaces can become a continuing reality throughout the weapons complex.

The labor movement has firmly supported the nuclear weapons programs throughout its existence. We continue our support of the modernization of the weapons program. It is our strong desire to cooperate work with Admiral Watkins and the Department of Energy in order to help solve the serious problems in the weapons complex. Working together, the health and safety protections which workers deserve can and must be provided as an integral part of the production process. We believe deeply that public confidence and the safety of the DOE weapons facilities needs to be reestablished. Such confidence can only be regained through the development of a program assuring the health and safety of workers as well as the surrounding environment. Ten years ago the commercial nuclear power industry was confronted with a similar problem of public confidence. The private sector working together with government and labor developed model programs that help renew some degree of public confidence. Certainly the weapons complex deserves no less an effort.

The CHAIRMAN. Thank you very much, Mr. Zeferetti.

Mr. Mallino.

STATEMENT OF DAVID L. MALLINO, DIRECTOR OF LEGISLATION, INDUSTRIAL UNION DEPARTMENT, AFL-CIO

Mr. MALLINO. Mr. Chairman, I can do this very quickly because everyone all morning has been talking about most of what I wanted to talk about, and you have heard it. Senator Wirth did a very good job in summarizing my testimony.

So very briefly in about one minute, let me just say that as far as we are concerned, the basic safety and health problem that we confront is a fundamental conflict between production on the one hand and concern for safety and health matters on the other.

Tragic experience has demonstrated time and again that when responsibility for production and safety and health are located in a single agency or a single entity or governmental agency, the production concern nearly always outweighs proper and adequate safety and health protections.

Experience with DOE and its contractors is a case in point. Indeed, as the record indicates and as Secretary Watkins has admitted, DOE and its contractors have been more concerned with the production of nuclear materials than with the occupational and environmental health of the workers and the community.

Thus, we propose that DOE be relieved of its safety and health responsibilities and that this function along with the necessary resources be transferred to the Department of Labor's Occupational Safety and Health Administration and the HHS' National Institute for Occupational Safety and Health for medical and scientific research and investigation.

Such a transfer, we believe, would provide for independent onsite safety and health of the workers involved.

Mr. Chairman, I might just simply refer without reading to you the seven key points in my testimony on pages 5 and 6 that we believe are basic to any kind of a safety and health legislation that the Congress might consider.

What I will do at this point, Mr. Chairman, since I am more interested in questions from you than in rereading the statement, is to end and respond to any questions that you might have.

[The prepared statement of Mr. Mallino follows:]

TESTIMONY OF

DAVID L. MALLINO, DIRECTOR OF LEGISLATION

INDUSTRIAL UNION DEPARTMENT (AFL-CIO)

BEFORE THE

ENERGY AND NATURAL RESOURCES COMMITTEE
UNITED STATES SENATE

October 31, 1989

Mr. Chairman, members of the Committee, my name is David Mallino and I am the legislative director of the Industrial Union Department (IUD) of the AFL-CIO.

The IUD, along with the AFL-CIO's Metal Trades Department (MTD) and the Building and Construction Trades Department, represent the 17 or so international unions whose members work at the Department of Energy (DOE) nuclear facilities.

At the outset, Mr. Chairman, let me state that the 80,000 workers in these facilities have been subjected to the worst possible safety and health conditions which have resulted in excessive injuries, disease and death. For far too long these men and women have confronted a wide range of unacceptable hazards including excessive exposures to radiation and other toxic substances used in the production of nuclear weapons as well as serious physical safety hazards.

As this Committee is well aware, much of the data and information concerning worker health and environmental contamination has been cloaked in secrecy. Yet after nearly 40 years of neglect, the new Secretary of Energy has now publicly admitted to the occupational and environmental mess that exist at these facilities.

While Secretary Watkins' public statements have been encouraging and his decision to release DOE data on worker exposure to radiation is a step in the right direction, there remains a host of serious problems.

For example in addition to radiation, there are a number of highly toxic chemicals and other substances used in production of nuclear weapons, excessive exposure to which causes a variety of cancers and other diseases. These include everything from beryllium and other heavy metals to asbestos. Because of the secrecy involved, we are only now getting some limited data on the health affects of some of these exposures. There is evidence to suggest, for example, that workers in the Rocky Flats, Colorado facility have experienced a 61 percent excess rate of cancer over the last 10 years. Similar data is beginning to surface from the other facilities including abnormally high rates of leukemia at the Savannah River, South Carolina facility.

Part of the problem, of course, is the general lack of occupational health data on both former and current DOE workers.

Indeed, one of the most critical areas that needs to be addressed in the very near future is an industry-wide survey and medical screening program to determine the health status of the workers at these facilities. We believe that such a survey will scientifically confirm what our members who work in these facilities have known for years: that the toxic exposures and physical conditions in the plants are injuring and killing them at intolerable rates.

What's to be done about all of this? We believe that as the Congress considers ways to address the serious environmental problems confronting these facilities, that the workers -- who are often exposed to the most hazardous conditions -- not be forgotten. Towards this end, we have a number of suggestions that ought to be considered in any legislative proposals that may be offered.

In the first place, there is a fundamental conflict between production on the one hand, and concern for safety and health on the other. Tragic experience has demonstrated time and again that when responsibility for production and safety and health are located in a single entity or government agency that production concerns nearly always out-weigh proper and adequate safety and health protections.

The experience with DOE and its contractors is a case in point. Indeed, as the record indicates and as Secretary Watkins has admitted, DOE and its contractors have been more concerned with the production of nuclear materials than with the occupational and environmental health of the workers and the community. Thus, we propose that DOE be relieved of its safety and health responsibility and that this function along with the necessary resources be transferred to the Department of Labor's Occupational Safety and Health Administration (OSHA) for standards setting and enforcement and to HHS' National Institute for Occupational Safety and Health (NIOSH) for medical and scientific research and investigation. Such a transfer would provide for independent, on-site oversight for safety and health of the workers.

Specifically, we believe that a proper safety and health program administered by OSHA/NIOSH should include the following components.

1. At least one full-time OSHA inspector should be assigned to each of the major facilities to inspect and enforce safety and health standards.

2. OSHA should review its existing standards as well as any applicable DOE standards to determine their adequacy and promulgate new ones if necessary.

3. NIOSH should be given access to existing DOE data and information concerning worker exposure to radiation and other toxic substances and should be given the authority to conduct additional epidemiological and other studies required to determine the impact these exposures have on the long term health of workers and their families.

4. Under NIOSH's direction each exposed worker should be given a base line physical examination to determine his or her current health status. These examinations should be followed by an industry-wide program of medical screening and surveillance to monitor the health of the workers.

5. Joint Labor-Management Safety and Health Committees should be established at each of the facilities to supplement and monitor the OSHA inspection effort.

6. All workers engaged in the clean-up of toxic or radioactive wastes at the facilities should be adequately and properly trained by certified safety and health training programs.

7. The financial and other resources necessary to carry out the new OSHA NIOSH responsibilities should be funded out of the DOE budget.

Moreover, the Nuclear Safety Commission established by the 100th Congress should have an explicit mandate to, oversee the in-plant safety and health conditions of the facilities in question. While the language of last year's legislation can be loosely interpreted to include in-plant safety and health responsibilities, any amendments to the Commission's functions that may be considered this year, should include an explicit direction to the Commission to monitor occupational safety and health conditions.

In addition to these safety and health concerns, we believe that the government has an economic responsibility to the workers and the communities affected by these facilities. If, in fact, some of the plants or portions of them will be closed or reorganized resulting in economic loss, then at a minimum a government funded economic adjustment assistance program ought to be established to moderate any job or economic loss that might ensue. This should include an adequate workers compensation program for those workers who suffer injury, disease or death due to work-related hazards.

Finally, Mr. Chairman, so long as DOE retains authority over occupational and environmental health, we believe that the Congress should insist that the agency employ people who -- by education, training and experience -- are well versed in the technical and policy dimensions of safety and health. Those charged with protecting the health and safety of the workers in these facilities should be occupational and environmental health professionals capable of making the critical decisions and taking the kinds of actions necessary to adequately protect the workers' health and safety. Thank you.

The CHAIRMAN. I have read that statement, and I appreciate that.

There is no question that safety has not been properly tended to by the DOE through the years. There is absolutely no question about that. That must be changed.

I think the real question is whether DOE with its new mandate, its new leadership, whatever new legislation we give them, should be the one to do either the safety or the epidemiological studies.

You could have HHS doing the epidemiological studies and DOE doing the day-to-day safety enforcement, or you could have the responsibilities that you all suggest.

We need to hear from OSHA. As I understand it, OSHA does not want to have that responsibility. Have you talked to them about that?

Mr. MALLINO. We have not talked to OSHA about this, but it is understandable that one agency would not want to co-op another agency's historic responsibilities.

We are very encouraged with respect to what Admiral Watkins has proposed. We have had at least one meeting with the Admiral and raised a number of these concerns.

We basically think that as long as you have this fundamental conflict in terms of who is responsible for operation and production and who is responsible for safety and health, at least in terms of the legal framework those two functions ought to be in separate agencies.

We basically believe that the regimen to do this, you ought to have one agency totally responsible for safety and health on the one hand and the other agency responsible for the production.

The CHAIRMAN. I must tell you, your logic is good.

Mr. MALLINO. I know that they do not want to do that, but we think that the Congress ought to make that decision for them.

The CHAIRMAN. I think your logic is good. All that you say makes perfect sense. I just wonder if it works in practice.

Mr. MALLINO. Obviously it is not working now. It has not worked for 40 years with the DOE being responsible for it.

The CHAIRMAN. There is no doubt about it.

Mr. MALLINO. I think what you heard today from the witnesses at least on the health research, the epidemiological and other research is that there simply is no professional capability within DOE or EPA, for that matter, to do this kind of work.

Senator Ford asked this morning how much is all this going to cost. Right now the Congress is appropriating tens of billions of dollars to the Department of HHS to precisely do this kind of work. We think that at least the epidemiological and other health-based research ought to go to the people in the government who know how to do it. NIOSH has been doing it for 17 years. They know how to do it.

Mr. ZEFERETTI. Mr. Chairman, Admiral Watkins was also very receptive to a suggestion that was made by us in regard to other than the medical surveillance that there be an establishment of labor, management and government kind of committee that could be structured to go forward to look at the operational part of it and what safeguards could be put into motion that would have an impact over all on a local——

The CHAIRMAN. Are you talking about an advisory committee or——

Mr. ZEFERETTI. An advisory committee. He was very receptive to that. That is something that we are advocating.

The CHAIRMAN. Should we write the advisory committee into the law?

Mr. MALLINO. We have proposed that, Mr. Chairman, in my statement. We have proposed safety and health committees. We think that there ought to be an advisory committee on the national level composed of labor, management and government to advise the Secretary on safety and health matters, but we also think that that ought to also occur at the local level. There should be local labor and management committees to do an on-site day-to-day monitoring of the safety and health problems that might arise.

The CHAIRMAN. Should that be negotiated as part of the contract?

Mr. MALLINO. We think that ought to be legislated.

Mr. ZEFERETTI. That should be legislated.

The CHAIRMAN. I do not recall seeing that in your statement as to the actual language. Do you have the language?

Mr. MALLINO. We do not have language.

Mr. ZEFERETTI. We do not have language. It is in both statements.

Mr. MALLINO. On page 6 of my statement we suggest that a joint labor and management safety and health committee should be established at each of the facilities to supplement and monitor what we believe ought to be an OSHA inspection effort.

The CHAIRMAN. I invite you to expand on that, if you would, and tell us how you would set it up and what kind of membership it ought to have with what responsibilities.

Senator McClure.

Senator MCCLURE. Mr. Chairman, I have no questions.

I do want to compliment you for your statement and also to encourage you to recognize what I know you know to be true already. I say it by way of parenthesis, not criticism.

Labor has some responsibilities here, too. While we are looking at all the things that have gone bad in the past, I guess we have to confess Congress has not done the kind of job you have a right to expect of it in terms of oversight.

I think it is also fair to say perhaps labor has not carried their end as fully as they should have with respect to safety of workers you represent.

So it is not by way of condemnation but to recognize where we are, that we are in this together, and if we are going to solve, we are going to have to solve it together.

I appreciate your testimony. I think it is thoughtful and constructive. Thank you very much.

The CHAIRMAN. I think what these witnesses are saying is that labor wants to exercise that prerogative by having these committees set up.

Mr. MALLINO. Just a final point, Mr. Chairman. There is a lot of concern about the environmental problems, and we can appreciate that, the community problems. If you want to talk about exposures, the highest exposures in these facilities are the people who are working in there. When the clean-up begins, whoever is going to do that clean-up work is going to have very, very hazardous conditions.

So while we appreciate the environmental problems, the community problems that exist here, we believe that if you sent some epidemiologic and some health monitoring teams into these plants you would find exposures to not only radiation but the other toxic substances used in those plants at much higher levels than you will find in the ambient environment.

Our people have been concerned about that for a number of years.

The CHAIRMAN. So you think the potential problem here is for the workers and not for the surrounding community?

Mr. MALLINO. We think that the preliminary data that we have seen and I have made reference to some data in my statement that there is a 61 percent increased incidence of cancer amongst the workers at the Rocky Flats facility, for example.

We are also seeing preliminary data coming from Savannah River that shows very high abnormal incidence of leukemia amongst the workers which does not show up in the normal population, which leads to the conclusion that they are being exposed to substances at much greater concentrations in those plants than the general public would be.

The CHAIRMAN. Gentlemen, thank you very much for your testimony.

[Whereupon, at 12:30 p.m., the hearing was adjourned, subject to the call of the Chair.]

DEPARTMENT OF ENERGY'S NUCLEAR FACILITIES

MONDAY, NOVEMBER 13, 1989

U.S. SENATE,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC.

The committee met, pursuant to notice, at 2:05 p.m. in room SD-366, Dirksen Senate Office Building, Hon. J. Bennett Johnston, chairman, presiding.

OPENING STATEMENT OF HON. J. BENNETT JOHNSTON, U.S. SENATOR FROM LOUISIANA

The CHAIRMAN. The hearing will come to order.

The purpose of today's hearing is to continue to receive testimony on the operation and management of the Department of Energy's facilities. Two previous hearings have been held by the committee. On October 5, the committee heard from Secretary of Energy James Watkins on the status of his efforts to address the problems at the Department's nuclear facilities. A second hearing on October 31 focused on waste cleanup and environmental compliance.

Today the committee will focus on worker health and safety issues related to the operation of the Department's facilities. There is no question that the Department of Energy has not paid proper attention to safety over the past 40 years. Unfortunately, for too many years safety has taken a back seat to materials production goals.

I do not believe that we are talking about an imminent danger to the public health and safety. But there are clearly problems to be corrected at these facilities, and new initiatives must be taken.

Secretary Watkins was given a daunting task when he was nominated by the President to take over responsibility for the Department of Energy. I think that we will all agree that he has done an excellent job thus far in turning things around at the Department. Secretary Watkins has taken a number of initiatives related to worker health and safety, and I applaud those efforts.

Today we will focus on those initiatives related to worker health and safety. We will focus on the specific provisions of several bills that are pending before the committee. Each of these bills takes a different approach to worker health and safety.

Senator Wirth's bill, S. 972, would transfer DOE's radiation health research programs to the Department of Health and Human Services.

Senator Glenn's bill, S.1304, would direct HHS to establish an advisory board to review DOE's programs and make recommendations for improvements.

The bill introduced by Senator McClure and me, S. 1802, attempts to codify Secretary Watkins' initiatives on worker health and safety.

The question before the committee today is whether the Department, under its new leadership and mandate, is adequately equipped to correct the ills created by four years of neglect. Or—is new legislation necessary to ensure that safety is accorded the proper attention? I am inclined to defer to Secretary Watkins' new leadership and to give his initiatives a chance to work. But I have an open mind on these issues, and I look forward to hearing from today's witnesses.

Today we will hear from a panel of adminstration witnesses from the Department of Health and Human Services and the Occupational Health and Safety Administration.

We will also hear from representatives from the Physicians for Social Responsibility and the Colorado Department of Health.

Our first panel will be Gerald F. Scannell, Assistant Secretary of Labor for Occupational Health and Safety, and Dr. Daniel Hoffman, Assistant Director for Science for the Center for Environmental Health and Injury Control at the Centers for Disease Control.

Before we hear from these witnesses, I would like to ask if Senator Domenici has any comments.

[The prepared statement of Senator Wirth follows:]

STATEMENT OF SENATOR TIM WIRTH

REORGANIZATION OF DOE RADIATION RESEARCH PROGRAM

NOVEMBER 13, 1989

Today the Energy Committee is continuing its efforts to reach a legislative solution to protect the health of Department of Energy nuclear weapons facilities workers and the public living nearby. I look forward to hearing from the medical community who are involved in conducting epidemiological studies and learn what changes can and should be made to ensure accurate and effective research can be conducted.

As I have said time and again, I am deeply concerned that the protection of these people has been slighted for too long -- before the enormous problems at DOE were recognized and even now, during consideration of how to turn the tide of mismanagement at the Department. I am encouraged by the Committee's action to move on health-related legislation during this Congress.

This year, as I have done in several prior Congresses, I have introduced the Radiation Research Reorganization Act, which would transfer the authority to conduct epidemiological studies of the effects of radiation from the Department of Energy to the Department of Health and Human Services. The testimony the Committee has received from the Department of Energy -- including the Secretary, the Department of Justice, the Environmental Protection Agency, and labor unions has convinced me now more than ever of the importance to transfer the research responsibilities.

Through years of neglect and adverse actions, the public trust in the Department of Energy has deteriorated. We find it hard to believe -- despite Secretary Watkins admirable intentions -- that on top of living up to its mandate to produce nuclear weapons, DOE will, from now far into the future, take seriously its responsibility to conduct accurate, meaningful health research and then turn it into effective policy. I believe that this may occur under the guidance of the current Secretary, but I, and thousands of other Americans, raise an eyebrow in disbelief that this new and improved policy will last beyond the Admiral's tenure.

This is why I continue to support legislation to ensure that reforms made will last. I also believe that to restore confidence and ensure protection, we must transfer the health research responsibility away from DOE, with it's record of inaction and mismanagement, to HHS, where scientists and researchers have proven their ability to develop reliable data on radiation releases and exposure levels. Secretary Watkins has testified that should the Secretary's Panel for the Evaluation of Epidemiologic Research Activities (SPEERA) recommend a transfer, he would adhere to that recommendation.

These changes must happen now. The gates to the nuclear weapons facilities are not going to close for good tomorrow, next month or even next year. The workers and the public have waited too long already. We cannot afford to retrace our steps and study the problem longer. There simply is no telling what adverse affects we may exacerbate by continuing to allow research -- that should be conducted by qualified professionals -- to be done by an understaffed, ill-suited department that directs funding away from its epidemiological research programs.

STATEMENT OF HON. PETE V. DOMENICI, U.S. SENATOR FROM NEW MEXICO

Senator **Domenici**. No, thank you, Mr. Chairman. I am delighted to be able to participate, and I share the concerns you have expressed here afternoon.

I, too, think we must improve the situation. I am not sure exactly how we should do it, but I think eventually this committee will come up with a good bill. I look forward to testimony from witnesses such as these. They can be helpful in our determinations.

Thank you, Mr. Chairman.

The **Chairman**. Mr. Scannell, we're glad to have you before the committee.

STATEMENT OF GERARD F. SCANNELL, ASSISTANT SECRETARY, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, DEPARTMENT OF LABOR, ACCOMPANIED BY LEO CAREY, DIRECTOR, FIELD PROGRAMS

Mr. **Scannell**. Thank you, Mr. Chairman.

Mr. Chairman, I have Leo Carey, Director of Field Programs for the Occupational Safety and Health Administration on my left to help me out.

I have been in my position about 1 month, so I do not have all the answers, Mr. Chairman. You have my complete statement. I would just like to read a summary of my statement, Mr. Chairman, if that is okay.

Mr. Chairman and members of the committee, I am happy to be here today to discuss OSHA's role in assuring the safety and health of workers at DOE nuclear defense facilities. These are government-owned, contract or operated, GOCO's we call them. I appreciate the importance of the concerns of this committee to protect workers at these facilities, and I know that Secretary of Labor Dole and Secretary of Energy Watkins are committed to a safe and healthful workplace for all DOE workers.

On a personal note, I not only share this commitment, but at one time early in my safety career I worked in a nuclear weapons production facility in a safety and health capacity and have firsthand experience and knowledge in the very concerns we are addressing today. I do not take lightly how critical it is to assure safety and health at these facilities.

I will summarize for you this afternoon OSHA's present responsibilities under the law and its role in the DOE safety assessment or Tiger Teams and comment in a general way on issues in the bills before the committee which would, among other things, transfer responsibility from DOE to OSHA.

In the event of any such transfer, we would need to review carefully our budget and staffing requirements to assure that they would achieve the health and safety goals of the administration. Under the OSH Act, OSHA has responsibility for assuring so as far as possible that virtually all of America's workers have safe and healthful places of employment. The OSH Act, however, does not apply to those working conditions addressed by the regulations of another Federal agency that affect occupational safety and health.

DOE under its statutory authority has assumed responsibility for worker safety and health at the GOCOs. To carry out our responsibilities to the 85 million workers covered by Federal and State OSHA, we have a budget of $257.1 million and a Federal staff of 2,367, of whom 1,087 are inspectors. These resources presently cover 6 million work sites, approximately 3.6 milllion of which are under Federal OSHA's direct jurisdiction.

We have an ever-evolving regulatory program to protect workers, an enforcement program which includes inspection and training, and other programs designed to complement our regulatory and enforcement responsibilities for workplace safety and health.

In June 1989, Secretary Watkins expressed great concern regarding the environmental protection, waste management and worker safety and health at the DOE nuclear facilities. He sought Secretary Dole's assistance in assessments of DOE defense production facilities to evaluate their compliance with OSHA standards.

Because of the Secretary of Energy's concerns and Secretary Dole's concerns for workers at the DOE contractor facilities, OSHA agreed to detail ten OSHA compliance specialists to serve as consultants on the DOE Tiger Teams for a period of approximately 3 months. These teams would evaluate all nonradiological safety and health conditions at three DOE sites and report back to Secretary Watkins regarding the findings. The results of these assessments—that is, a comprehensive evaluation of the OSHA inspectors' findings—will be a critical factor in any administration decision regarding how best to assure the future safety and health of workers at the DOE contractor workplace.

At this time, OSHA has general comments for the committee's consideration on several issues in various congressional bills, including S. 1802 and S. 1304, which transfer responsibility to OSHA for worker safety and health at DOE facilities.

First, with regard to resources, at this point OSHA lacks sufficient information to give the committee any assessment of what its needs might be if responsibility for inspecting GOCOs should be transferred. It is safe to say, however, that any expansion of our present responsibilities would require additional staffing and budget.

Now that we have completed visits to the three DOE GOCO plants, we will be better equipped to assess our needs. In the next few weeks, we will be evaluating our inspectors' report and will be meeting with and debriefing the OSHA inspectors who did the actual assessment visits.

Second, another crucial issue affecting resources is the frequency of inspections. One of the bills before the committee would require a comprehensive inspection once every year. That frequency rate would be very resource intensive and would establish an inspection frequency rate for DOE facilities which is far different from the rate for OSHA-regulated high hazard facilities.

The OSH Act did not envision annual inspections. It does, however, require inspection of worker complaints. These complaint investigations combined with period comprehensive inspections provide a high level of safety and health activity.

The bills before this committee would require the Secretary of Labor in consultation with the Secretary of Energy to promulgate regulations to govern the application of the OSH Act to DOE nuclear facilities.

The regulations are to include the standards to be applied to such facilities and the manner and process for enforcement of the standard. We do not see the need for new rulemaking on all issues or for an exclusive DOE facility standard if that is what is intended.

OSHA recommends one set of basic standards for similar workplaces. OSHA's current regulations are constantly evolving to ensure an ever safer workplace. In the case of the DOE workplace, there may be special needs, but if there are these could be addressed in a more expeditious fashion than simply starting from scratch.

Where DOE has more protective standards, however, we would welcome those standards to be included with the enabling legislation.

In conclusion, Mr. Chairman and members of the committee, you can be assured that the Department of Labor will work closely with you and the staff should the committee decide through legislation that transfer of responsibility for worker safety and health from DOE to OSHA is necessary.

Again, I appreciate the opportunity to give the committee OSHA's comments and thoughts at this stage in your process. As you can tell, the legislation, should it be adopted, will have significant impact on OSHA and DOE, and we would want to work with you in this important endeavor.

Thank you, and I will be happy to answer any questions.

[The prepared statement of Mr. Scannell follows:]

STATEMENT OF
GERARD F. SCANNELL
ASSISTANT SECRETARY OF LABOR
U.S. DEPARTMENT OF LABOR
BEFORE THE
COMMITTEE ON ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE
November 13, 1989

Mr. Chairman and Members of the Committee:

Thank you for the opportunity to appear today to discuss the role of the Occupational Safety and Health Administration (OSHA) in addressing the safety and health of workers at the Department of Energy (DOE) government-owned, contractor-operated nuclear defense facilities (GOCO).

I appreciate the importance of the concerns of the Department of Energy and this Committee to protect workers at these facilities as well as in our communities surrounding these facilities. DOE is charged with meeting our country's need for production of nuclear defense materials. At the same time it appears from recent reports that the facilities face serious problems related to worker safety. Congress and the public demand that production of defense nuclear materials be done in a safe and healthful manner, and I know that Secretary of Labor Dole and Secretary of Energy Watkins are committed to that goal. On a personal note, I not only share this commitment, but at one time worked in a nuclear weapons production facility in a safety capacity and have firsthand experience in the very concerns we are addressing today.

My testimony today will discuss OSHA's present responsibilities under the law and its role on DOE's "Tiger Teams" (safety assessment teams) and comment on issues in Congressional bills that propose to transfer responsibility from DOE to OSHA for workplace health and safety at DOE contractor-operated facilities. In the event of any such transfer, we would need to review carefully our budget and staffing requirements to assure that it would achieve the health and safety goals of the Administration.

OSHA Act Responsibilities

OSHA is responsible under the Occupational and Safety and Health Act (OSH Act) for assuring so far as possible safe and healthful working conditions for virtually all working men and women in the nation. However, under section 4(b)(1) of the OSH Act, the Act does not apply to those working conditions addressed by the regulations of another federal agency that affect occupational safety and health. Under DOE's statutory authority, DOE is one of those agencies. Therefore DOE has assumed responsibility for worker safety and health at its GOCOs.

To carry out our responsibilities to 85 million covered workers in this country, we have a budget of $ 257.1 million and a staff of 2,367, of whom 1,087 are inspectors. These resources presently cover six million worksites. We have an ever evolving regulatory program to protect workers, an enforcement program which includes inspection and training, and other programs designed to complement our regulatory and enforcement responsibilities for workplace safety and health.

Obviously, OSHA has immense responsibilities and limited resources. Therefore a critical element of any effort to expand OSHA's responsibilities must include adequate resources so that the present level of safety in the "non-DOE" workplace is not diminished.

OSHA's Present Role on DOE Tiger Teams

In June 1989, Secretary Watkins expressed great concern regarding the environmental protection, waste management and worker safety and health at DOE nuclear facilities. He sought Secretary Dole's assistance in assessments of DOE's defense production facilities to evaluate their compliance with OSHA standards. Because of the Secretary of Energy's concerns and Secretary Dole's concerns for the workers at the DOE contractor facilities, OSHA agreed to detail 10 OSHA compliance specialists to serve as consultants on DOE Tiger Teams for a period of approximately three months. These teams were to evaluate all non-radiological safety and health conditions at three DOE sites and report back to Secretary Watkins regarding the findings.

The facilities to be evaluated are very large and the effort is underway, but not yet completed. The results of these assessments will be another critical factor in any Administration decision regarding how best to assure the future safety and health of workers at the DOE contractor workplace. Secretary Dole is committed to workplace safety and health and, should it be determined that OSHA's role or responsibilities are to be continued on a long term basis or expanded, the Secretary of Labor will be an active participant to assure (1) that OSHA can adequately carry out new responsibilities and (2) that present responsibilities are not compromised. In that light, OSHA has comments for the Committee's consideration on several issues in various Congressional bills, including S.1802 and S.1304, which transfer responsibility to OSHA for worker safety and health at DOE facilities.

ISSUES IN CONGRESSIONAL BILLS:

(1) Resources

As stated previously, OSHA resources are limited. Currently, while OSHA has a program to target the most hazardous workplaces and inspects if there is a complaint or an imminent hazard present, Federal OSHA each year comprehensively inspects approximately one in every 100 of the workplaces for which it has responsibility. At this point, OSHA lacks sufficient information to give the Committee any assessment of what its needs might be if responsibility for inspecting GOCO's should be transferred to OSHA; but it is possible that any expansion of our present responsibilities would require additional staffing and budget. We do know that there are approximately 100 sites where approximately 160,000 persons are employed. Each site may include literally hundreds of separate buildings. And of course if additional inspectors are required, OSHA may need regulatory and enforcement staff as well as other support staff. For these personnel OSHA would require additional funding for laboratory support, travel, training, equipment, and space.

A secondary but crucial issue affecting resources is the frequency of inspections. One of the bills before the committee would require a comprehensive inspection once every year. That frequency rate would be very resource intensive and would establish an inspection frequency rate for DOE facilities which is far different from the rate for OSHA-regulated high hazard facilities. The OSH Act did not envision annual inspections; however, it requires inspection of worker complaints, which, when combined with periodic comprehensive inspections, provide a high level of safety and health.

Sufficient Lead Time for a Transfer

If Congress determines that the responsibility for worker safety and health in the DOE facilities should be transferred from DOE to OSHA, it is important that OSHA have sufficient lead time to assure that regulations and trained inspectors are in place. There are several critical elements that will determine the appropriate lead time; however it is safe to say that one year is too short a timeframe and that five years is probably too long.

Promulgation of Regulations for DOE Nuclear Facilities:

Congressional bills would require the Secretary of Labor, in consultation with the Secretary of Energy, to promulgate regulations to govern the application of the OSH Act to DOE nuclear facilities. The regulations are to include the standards to be applied to such facilities, and the manner and process for enforcement of the standards. We do not see the need for new rulemaking on all issues, or for an exclusive DOE facility standard (if that is what is intended).

Such new rulemaking would take many years, would require significant staff time, and might result in different standards for protecting workers.

OSHA recommends one set of basic standards for similar workplaces. OSHA's current regulations are constantly evolving to assure an ever safer workplace. In the case of the DOE workplace, there may be special needs, but if there are, these could be addressed in a more expeditious fashion than simply starting from scratch.

In conclusion, Mr. Chairman and Members of the Committee, you can be assured that the Department of Labor will work closely with you and the staff should the Committee decide through legislation that a transfer of responsibility for worker safety and health from DOE to OSHA is necessary. Our goal would be twofold. First, to assure that OSHA is able to carry out our present responsibilities to workers under the Act. And, second, that OSHA be able to carry out any new responsibilities in a manner that would be consistent with Congressional intent to assure worker safety and health.

Again, I appreciate the opportunity to give the Committee OSHA's comments and thoughts at this stage in your process. As you can tell, the legislation, should it be adopted, will have a significant impact on OSHA and DOE, and we would want to work with you to draft a meaningful and workable law.

Thank you and I will be happy to answer your questions.

The CHAIRMAN. Thank you very much, Mr. Scannell.

Dr. Hoffman.

STATEMENT OF DR. DANIEL A. HOFFMAN, ASSISTANT DIRECTOR FOR SCIENCE, CENTER FOR ENVIRONMENTAL HEALTH AND INJURY CONTROL, CENTERS FOR DISEASE CONTROL, DEPARTMENT OF HEALTH AND HUMAN SERVICES, ATLANTA, GA, ACCOMPANIED BY DAVID BROWN, SENIOR EPIDEMIOLOGIST, NIOSH, AND MARK BASHOR, ASSISTANT DIRECTOR FOR FEDERAL FACILITIES, ATSDR

Dr. HOFFMAN. Thank you very much, Mr. Chairman and Members of the committee. I am Dr. Daniel Hoffman, Assistant Director for Science for the Center for Environmental Health and Injury Control at CDC. I welcome this opportunity to testify on behalf of the Department of Health and Human Services today and to describe our past and current role in assessing the possible health effects associated with past radiation released at several DOE sites.

Within DHHS, two agencies of the public health service have been involved with conducting studies of environmental and occupational radiation exposures from DOE facilities. The Centers for Disease Control, in particular the Center for Environmental Health and Injury Control, and the National Institute of Occupational Safety and Health, or NIOSH, which are both centers at CDC, and the Agency for Toxic Substances and Disease Registry or, for the sake of brevity, ATSDR.

Most of the DOE sites studied by the CDC are on the national priorities list, or NPL, and fall under ATSDR's responsibilities described by the Comprehensive Environmental Response Compensation and Liability Act as amended. The ATSDR has a number of responsibilities mandated by this act at DOE sites and facilities by virtue of their being listed or proposed for listing on the NPL.

I am accompanied today by Mr. David Brown, Senior Epidemiologist with NIOSH, who will be available in the audience to assist in responding to questions about NIOSH activities, and Dr. Mark Bashor, Assistant Director for Federal Facilities, ATSDR, who will be available for questions concerning ASTDR projects.

Studies of populations exposed to ionizing radiation, especially at low doses, can be characterized as being resource intensive, requiring a large and well-trained staff to develop, conduct and analyze data from these studies, requiring large populations followed for long periods of time, needing accurate assessment of radiation exposures and other personal exposures which may influence risk, and requiring methods to completely and accurately identify all relevant health effects that may occur among these populations under study.

Much of the uncertainty over the possible health effects of exposure to low doses of ionizing radiation evolves from the difficult and often complex nature of these studies.

At this time I would like to briefly review some of CDC's and ATSDR's activities in environmental and occupational radiation studies. The first of these is the Hanford health effect studies.

In October 1988 Congress appropriated funds to enable the CDC to conduct a follow-up study of the possible health effects to exposure to radioactive iodine 131 which was released during plutonium project in the Hanford works in central Washington State between 1944 and 1957. During this period, over one-half million curies of radioactive iodine were released to the atmosphere. Compared with other radionuclides, I-131 is likely responsible for high radiation doses and greater risk for potential adverse health effects especially for the thyroid gland among residents in the off-site communities.

The study is estimated to take about three to five years to complete, and a contract was recently awarded to the Fred Hutchinson Cancer Research Center in Seattle to initiate this study. CDC scientists will work closely with the Cancer Center to complete this project.

The second of these studies is the Feed Materials Production Center in Fernald, OH. In 1985 CDC was requested to undertake a feasible epidemiologic study of health effects among residents in communities near the FMPC in Fernald. This request was based on data indicating that large quantities of uranium were released to the environment during past operations of this facility. Due to the problems with previous dose reconstruction efforts, it was decided that CDC scientists should conduct an independent verification of the radiation dose reconstruction report to use in assessing the possible feasibility of health effect studies.

To support this project, in June of 1989 DOE transferred three positions and $700,000 to CDC for a period of 18 months. This project should be completed by early spring of 1991, and it is essential that all the radiation release data be accounted for and evaluated before an appropriate assessment can be made of the health study.

CDC scientists have also been involved in a number of activities over the last few years ranging from reviewing data from the Savannah River plant, providing assistance to the State of Colorado at the Rocky Flats plant, conducting health studies of the veterans of the Armed Services who were stationed at the Nevada test site and exposed to radiation from nuclear weapons testing.

During the last few years, scientists at NIOSH have conducted epidemiologic studies of health effects among workers at several DOE facilities including the FMCP in Fernald, OH, the Portsmouth Uranium Enrichment Complex in Pipeton, OH, and Y12 plant in Oak Ridge, TN. These studies included exposure to both ionizing radiation and various chemicals.

NIOSH initiated and completed a large study of workers exposed to ionizing radiation during maintenance of nuclear submarines at the Portsmouth Naval Shipyard in New Hampshire, and they have also played a major role in the study of lung cancer among uranium miners in the Western United States.

ATSDR currently has big health responsibilities under CERCLA as amended for the 17 DOE sites listed on the NPL or proposed for the NPL by the EPA. These activities include pilot studies of health effects, registries of exposed persons, health surveillance programs, health consultations, and emergency response activities.

ATSDR will be working with DOE, EPA, the States and other agencies if necessary to address the public health impacts of potential population exposures to ionizing radiation and various chemicals at these sites.

In summary, the CDC has a long history of conducting epidemiologic studies or health investigations of populations exposed to environmental and occupational radiation. Because CDC's staff are recognized experts in this area and because of CDC's delegation as the lead public health agency to respond to radiation emergencies, we are developing a radiation studies program in order to better respond to current and future scientific demands.

ATSDR staff are currently working closely with DOE to develop a collaborative approach for carrying out public health responsibilities at DOE facilities.

This completes my testimony. I will be happy to answer any questions you may have.

Thank you.

[The prepared statement of Dr. Hoffman follows:]

DEPARTMENT OF HEALTH & HUMAN SERVICES
Public Health Service

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Testimony of

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DEPARTMENT OF HEALTH AND HUMAN SERVICES

before the

U.S. SENATE
COMMITTEE ON ENERGY AND NATURAL RESOURCES

Monday, November 13, 1989

2:00 p.m.

Room SD-366, Dirksen Building

Introduction

Good afternoon Mr. Chairman and Members of the Committee. I am Dr. Daniel Hoffman, the Assistant Director for Science for the Center for Environmental Health and Injury Control (CEHIC), Centers for Disease Control (CDC). I am testifying on behalf of the Public Health Service. I welcome this opportunity to describe our past and current role in assessing the possible health effects associated with past radiation releases at several Department of Energy (DOE) nuclear weapons production facilities and other sites.

Within the Department of Health and Human Services, two agencies of the Public Health Service are involved with DOE facilities: the Centers for Disease Control (CDC) and the Agency for Toxic Substances and Disease Registry (ATSDR).

The CDC, in particular the Center for Environmental Health and Injury Control (CEHIC) and the National Institute for Occupational Safety and Health (NIOSH), has a long history of conducting health and environmental studies at DOE nuclear weapon production facilities. The CDC also has a successful history of conducting large and complex epidemiologic cohort studies as exemplified by the Agent Orange and Vietnam Experience Studies conducted by CEHIC.

Most of the DOE sites studied by CDC are on the National Priorities List (NPL) and fall under ATSDR's responsibilities described by The

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended. The ATSDR has a number of responsibilities mandated by this Act at Department of Energy (DOE) sites and facilities by virtue of their being listed or proposed for listing on the (NPL). These activities are conducted as appropriate, subsequent to the findings of the initial health assessment: (1) pilot studies of health effects; (2) full scale epidemiological or other health studies; (3) registries of exposed persons; (4) health surveillance programs; (5) health consultations; and (6) emergency response activities.

This review summarizes CDC's past and current activities in environmental public health and radiation epidemiology and ATSDR's efforts under CERCLA at DOE facilities. If you have detailed questions about NIOSH activities, Dr. David Brown, Senior Epidemiologist with NIOSH, is available in the audience to assist in responding. For detailed information on ATSDR projects, Dr. Mark Bashor, Assistant Director for Federal Facilities, ATSDR, is here and available for questions.

SUMMARY OF CDC'S PAST AND CURRENT ACTIVITIES:

Hanford Health Effects Study

In February 1986, the U.S. Department of Energy made public previously classified or unavailable documents on radiation releases and environmental monitoring during the early years of plutonium production at the Hanford facility. These data, which comprised over 19,000 pages of documents, indicated that during the first few years of operation, Hanford plutonium production reactors and reprocessing facilities released substantial quantities of radionuclides to the environment. These revelations resulted in the State of Washington requesting that the CDC convene a panel of expert scientists charged with the task of reviewing these data and making recommendations to the States of Washington and Oregon and to the Federal Government. CDC staff were responsible for coordinating this panel's activities. This thorough review resulted in the recommendation that Iodine-131, a radioactive isotope of iodine, was the radionuclide released in the largest quantity, over 500,000 Curies between 1946 through 1954. Compared with other radionuclides, Iodine-131 is likely responsible for higher radiation doses and greater risk for potential adverse health effects, especially for the thyroid gland, among residents in off-site communities. For these reasons, the panel recommended that a dose reconstruction project be conducted that would determine the radiation doses to the public from the Iodine-131 releases. The panel also recommended that highest priority be given to assessing the feasibility of conducting a study of thyroid disease among residents of the surrounding communities potentially exposed to radioiodine during the periods of heaviest release.

Congress appropriated funds to enable the CDC to initiate a follow-up study of thyroid disease among residents of communities surrounding the Hanford facility who were potentially exposed to Iodine-131 between 1944 through 1957. This study will take up to four years to complete. CDC scientists are working closely with the dose reconstruction group during this project in order to develop individual thyroid dose estimates. These dose estimates are essential to investigating the possible relationship between Iodine-131 exposure from off-site Hanford releases and the risk of thyroid disease in exposed citizens. In September 1989, a contract was awarded by CDC to the Fred Hutchison Cancer Research Center (FHCRC) in Seattle, Washington. Staff at the FHCRC will be responsible for developing a study protocol, conducting a pilot study, and assessing the feasibility of a full-scale epidemiologic study of the risk of thyroid disease in relation to Iodine-131 exposures. This study is being conducted in close collaboration with CDC scientists.

Savannah River Plant, Aiken, South Carolina

In 1983, the CDC investigated a purported cluster of polycythemia vera, a blood disease possibly related to radiation exposure, occurring in the vicinity of the Savannah River Plant (SRP). CDC scientists could not confirm the existence of this cluster. The same year, the DOE asked CDC to convene a group of scientists to assess the feasibility and usefulness of conducting epidemiologic studies of potential health effects in populations residing around the SRP. Based on the data on radiation releases presented to the panel which indicated minimal off-site exposures, it was the view of these consultants that no additional community studies were recommended.

Rocky Flats Nuclear Weapons Plant, Golden, Colorado

In 1987, the State of Colorado and the Agency for Toxic Substances and Disease Registries (ATSDR) both requested that CDC staff serve on a scientific panel that would evaluate a proposal to incinerate mixed low-level radioactive and toxic waste on-site at the Rocky Flats facility. Although the panel felt that the resultant population exposures from this controlled incineration would not exceed State or Federal regulations, they made several recommendations to improve the safety of the proposed trial burn. Consequently, the trial burn was postponed indefinitely, pending the completion of these modifications and the development of a full environmental impact statement.

In 1989, the State of Colorado asked for CDC assistance in designing epidemiologic studies of potential health effects occurring in residents of communities adjacent to the Rocky Flats plant. CDC staff will continue their collaboration with the State upon request.

Feed Materials Production Center (FMPC), Fernald, Ohio

In April 1985, Senator John Glenn requested that CDC undertake, if feasible, an epidemiologic study of health effects among residents in communities near the FMPC in Fernald, Ohio. This request was based on preliminary data indicating that large quantities of uranium were released to the environment during past operations of this facility. The CDC agreed to evaluate the feasibility of studying the relationship between exposures to these radionuclides and possible health effects. As the initial step in the feasibility study, the CDC requested from the DOE a reconstruction of atmospheric releases of radionuclides and resultant radiation doses to residents of communities adjacent to the FMPC. This step was agreed upon following a series of meetings between representatives of the CDC, DOE, FMPC, the State of Ohio, and the Environmental Protection Agency.

In May 1987, Westinghouse Material Company, the facility operator, provided a draft report of atmospheric releases of radionuclides from the FMPC between 1951, the year of first operation, to 1984. The DOE then contracted with International Technology Corporation (IT) to use standard computer modeling techniques to estimate radiation doses to local residents based on the inventory of atmospheric radionuclide releases. A draft of the final IT report was provided to CDC in April 1988. Data from this report were to be used to assess the feasibility of conducting an epidemiologic study. CDC planned to have this report peer reviewed in August of 1988 and then released in a public meeting to be held in Fernald in the fall of 1988, along with DOE's dose reconstruction report. However, CDC learned that significant unmonitored discharges of uranium and thorium from the FMPC were not included in the original DOE and IT reports. Since these increased releases might have affected the conclusions of the CDC feasibility report, it was decided not to proceed at this time pending further review of the new radiation release data.

In December 1988, the DOE transmitted the amended dose reconstruction report to IT so that their work on radiation doses and cancer risk assessment could be modified. Since that time, it was decided that CDC should conduct an independent verification of the source term estimate and develop their own dose reconstruction report to be used in assessing the feasibility of conducting epidemiologic studies. To support this effort in June 1989, the DOE transferred 3 positions and $750,000 to CDC for a period of 18 months. The source term estimation and dose reconstruction project should be completed by March of 1991. It is essential that all of the radiation release data be accounted for and evaluated before an appropriate assessment can be made of the feasibility of conducting an epidemiologic study of the community. The credibility of any feasibility assessment is linked to the accuracy and completeness of both the dose reconstruction and risk assessment reports. Conducting epidemiologic studies in the absence of exposure data does a disservice not only to science but also to the community. Deriving meaningful conclusions from well-conducted epidemiologic studies is difficult enough even under the best of circumstances.

NIOSH Activities at the FMPC

Beginning in 1985, NIOSH conducted a medical study of approximately 150 workers employed for ten or more years at the Center. Investigators administered a detailed questionnaire, urine and blood sampling to assess renal function, chest x-ray and pulmonary function testing, and post-shift urine sampling to estimate current uranium exposure. They found some associations between respiratory effects (respiratory obstruction and shortness of breath) and uranium exposure. The findings of this medical study were reported in July 1987.

Portsmouth Uranium Enrichment Complex, Piketon, Ohio

During 1986, NIOSH conducted a mortality analysis for a population of 5,774 workers employed at the Complex between 1954 and 1982. Exposure potential was evaluated using data from an extensive urinalysis data base maintained by the Goodyear Atomic Corporation operator of the complex. Because of limitations of the study conditions (the study involved a young cohort, a relatively short interval since first employment, and a short observation period), no definitive conclusions regarding any association between employment at the Complex and subsequent mortality of the workers were possible. NIOSH recommended that the study be updated after sufficient time had transpired to permit the detection of occupational disease and death. The epidemiologic study results were reported to the employer, employees, and the DOE representative in March 1987. NIOSH recommended that the study be updated after sufficient time had transpired to permit the detection of occupational disease and death.

Y-12 Plant/Martin Marietta Systems, Inc., Oak Ridge, Tennessee

At the request of the House Committee on Science and Technology, in 1983, NIOSH began investigating the chronic health effects of past exposures to mercury among workers at the plant. At the time of the request, DOE and their contractor for the facility were already planning to conduct their own medical study. NIOSH became involved in reviewing the protocol and monitoring the progress of the study, which was conducted by researchers at the University of Michigan. Investigators found correlations between increasing exposure to elemental mercury and declining neurologic function. A weak but statistically significant relationship between mercury exposure and miscarriages was also found.

SUMMARY OF ATSDR'S ACTIVITIES UNDER CERCLA AS AMENDED

ATSDR currently has public health responsibilities under CERCLA as amended for the 17 DOE sites listed or proposed by EPA for listing on the NPL. These are: Lawrence Livermore National Laboratory, (Site 300), Rocky Flats Plant, Idaho National Engineering Laboratory, W.R. Grace and Co/Wayne Interim Storage Site, Brookhaven National Laboratory, Feed Materials Production Center, Mound Plant, Savannah River Site, Oak Ridge Reservation, Monticello Mine Tailings, Brownsville Power Administration Ross Complex, Hanford, 100 Area, 200 Area, 300 Area, and 1100 Area, and the Weldon Spring Quarry/Plant/Pits (DOE and Army).

ATSDR will be working with the DOE, EPA, the States, and other agencies as necessary to address the public health impacts of the sites which are on the NPL (or which are the subject of a petition) by way of conducting health assessments as required by CERCLA. The ATSDR is currently working with the DOE to develop a Memorandum of Understanding between the agencies for these environmental public health studies. The following summarizes ATSDR's work at DOE facilities.

Lawrence Livermore (NPL)

The ATSDR considers this facility to be a potential public health concern caused by the possibility of human exposure via the following pathways: Ingestion of and direct contact with contaminated groundwater and/or soil, ingestion of food contaminated with hazardous substances and inhalation of volatile organic compounds such as carbon tetrachloride, trichloroethylenes and dichloroethanes. The data supplied to ATSDR did not include radioactive materials. ATSDR is continuing to work with DOE to evaluate this site.

Weldon Springs (NPL)

ATSDR considers this site to be of public health concern because of the risk to human health caused by the likelihood of human exposure to both chemical and radioactive materials. Soil sampling information identified, on-site, the presence of radium-226, thorium-230, uranium, trinitrotoluene (TNT), polyaromatic hydrocarbons and polychlorinated biphenyls (PCB). Uranium was also found in groundwater and surface water flowing through the site. Off-site monitoring indicated the presence of uranium, TNT and benzene compounds in groundwater and uranium in surface water. The Agency determined human exposure could occur via ingestion of and direct contact with groundwater and soil, surface water and food materials. Furthermore, inhalation of contaminated air was considered a viable pathway of exposure based on the available environmental sampling data. ATSDR continues to work with DOE to further evaluate this site.

Monticello Radioactive Contaminated Properties (NPL)

A former uranium mill site, radioactive contaminants include uranium, thorium, radium, and radon have been found in groundwater, surface water, soil and mine tailings on-site. Off-site, these have also been found in groundwater, surface water and soil samples. As in those sites in which environmental data are lacking, ATSDR considers all human exposure pathways to be of concern. Therefore, ATSDR considers this site to be of public health concern because of the potential risk to human health caused by the possibility of human exposure to radioactive materials. ATSDR continues to work with DOE to further evaluate this site.

Shpack Landfill/Attleboro Landfill

This site was initially a municipal landfill in which high radiation levels were detected. DOE now supervises the site. Contaminants were detected both on-site and off-site in groundwater, surface water (off-site only) and soil includes heavy metals such as manganese, lead, arsenic and cadmium, organic compounds including PCB's, vinyl chloride, tetrachloroethylenes, and radioactive material including uranium and radium. A private residential well was found to be contaminated with high levels of manganese. From the information supplied to ATSDR it is unclear as to the origin of the radioactive material. The Agency considers this site to be of potential health concern because of the risk to human health, particularly young children, caused by the potential for exposure to hazardous substances via ingestion of soils and possibly contaminated groundwater. ATSDR continues to work with DOE to further evaluate this site.

Wayne Interim Storage Site (formerly W.R. Grace) (NPL)

This site is presently owned by DOE with the major contaminants being uranium and thorium and their decay products. Radioactive material has been detected in air (radon), sediments, surface water and groundwater. While portions of the site have been remediated, there are still areas in which the amount of radioactive materials exceed safety standards. The majority of the site has undergone remediation; and, based on the information supplied to ATSDR, this site is currently not considered a public health concern. However, further evaluations must be undertaken to determine the need for health studies. ATSDR continues to work with DOE to further evaluate this site.

Reactive Metals, Inc.

Reactive Metals, Inc., (RMI) is a subcontractor to Westinghouse, the contractor for the Feed Materials Production Center at Fernald. The ATSDR has recently received a petition for a health assessment (as permitted by CERCLA as amended) from the Sierra Club, Northeast Ohio Group, and the Sunflower Alliance. The petitioners are concerned that RMI released radionuclides such as uranium, plutonium, and perhaps technetium into the atmosphere and surface waters in the vicinity of the plant operations. ATSDR is responding to the petition, and has scheduled a meeting this month in Ohio.

OTHER ATSDR AND CDC ACTIVITIES

Staff from ATSDR and CDC have also participated in emergency response activities involving radiation exposures including one in January 1986 at the Sequoyah Fuels Corporation, Gore, Oklahoma, where uranium hexafluoride (UF_6) was released to the environment following the rupture of a 14-ton UF_6 cylinder. The PHS scientists were members of an interagency task force that included members from the Nuclear Regulatory Commission, the Environmental Protection Agency, the U.S. Department of Agriculture, and the State of Oklahoma. The task force recommended continued follow-up of exposed workers. In 1977, CDC initiated a follow-up study of over 3,000 former soldiers exposed to a single nuclear weapons test (shot "Smoky") at the Nevada Test Site in 1952. Many of these soldiers were sent into "ground zero" soon after the detonation to engage in field maneuvers or to retrieve contaminated equipment. As excess risk of leukemia was reported among these soldiers who received an average whole body radiation dose, based on film badge readings, of 500 millirad. Findings of this study were reported in the Journal of the American Medical Association in 1983.

SUMMARY

In summary, CDC has a long and successful history of conducting epidemiologic studies or health investigations of populations exposed to ionizing radiation. Because CDC staff are recognized experts in this area, and because of CDC's delegation as the lead Public Health Service agency to respond to radiation emergencies, CEHIC is developing a radiation studies branch in order to better respond to current and future scientific demands.

In addition, ATSDR has extensive responsibilities under CERCLA as amended, which include undertaking health assessments, pilot studies of health effects, full scale epidemiological or other health studies, registries of exposed persons, health surveillance programs, health consultations, and emergency response activities at DOE facilities by virtue of their being listed or proposed for listing on the NPL. Since the 1986 amendments to CERCLA expanded ATSDR's responsibilities, the agency has recruited a multidisciplinary staff in the Division of Health Studies, the Division of Toxicology, and the Division of Health

Assessment and Consultation in order to address these CERCLA responsibilities. The ATSDR is currently working with DOE to develop a Memorandum of Understanding for carrying out its public health responsibilities related to DOE facilities.

That completes my testimony. I shall be glad to answer any questions which you may have.

The **Chairman**. Thank you very much, Dr. Hoffman.

First of all, Mr. Scannell, speaking of the lead time in which to phase in these OSHA inspections, what amount of lead time do you think would be appropriate?

Mr. **Scannell**. If the legislation was passed, Senator, I guess——

The **Chairman**. In our legislation, we have provided 5 years, and that is, I think, probably too long as I understand your testimony.

What do you think would be an appropriate time?

Mr. **Scannell**. I think I said one would be too short, and five would be too long. Three.

The **Chairman**. You think three would be about right.

Do you think that DOE could inspect itself using OSHA standards, or it should be done by OSHA if you are given the resources to do that?

Mr. **Scannell**. I think DOE could inspect themselves. We have been talking to them just recently about training some of their people at our Training Institute in Des Plaines, Illinois either to train their trainers or to train their inspectors. Either arrangement would have quite an impact on our Institute.

There is no reason in my mind, however, that they could not do the inspections themselves.

The **Chairman**. What do you say to the argument that having someone inspect themselves is like having someone give themselves a grade at school, you just cannot count on that?

Mr. **Scannell**. It is tough to answer that one. That is right. The people who ask that question really do not want to believe that someone can inspect himself, and it is difficult to answer that question.

The **Chairman**. How about the credibility of the inspection even if it is done properly?

Mr. **Scannell**. I think they could show credibility. Again, people just doubt that there has been a complete comprehensive inspection without any bias, and again it is difficult to assure people of that.

The **Chairman**. Do you anticipate any problems in applying your existing regulations to DOE facilities because of the classified nature of the operations?

Mr. **Scannell**. Well, a hazard is a hazard is a hazard. I think our standards would apply to the majority of hazards in the facility. If in fact there were some extremely unique situations that are unique to that facility, because of the kind of product that they make, there could be special standards developed for that process, or we could, if the enabling legislation was so written, use the DOE standards if they are more protective for those hazards.

The **Chairman**. How about unannounced inspections? You have to have those, as I understand it. Would that be a problem?

Mr. **Scannell**. No. I think unannounced inspections would be a requirement.

The **Chairman**. We would need new regulations, would we not?

Mr. **Scannell**. Not for us, no, sir.

The **Chairman**. Not for you?

Mr. **Scannell**. No.

The CHAIRMAN. Dr. Hoffman, is it the Department's position that all of DOE's radiation research studies should be transferred to HHS?

Dr. HOFFMAN. The position right now is basically that which was articulated by Mr. Wakefield in testimony two weeks ago, that the Admiral is making a concerted effort to undo some of the problems in the Department, and part of this is to establish an advisory panel which is meeting today in Denver to make recommendations, and that includes the transfer of the program.

We feel it is premature at this time to talk about transfer until the panel has made the recommendations.

The CHAIRMAN. I gather your judgment will be that they will make that recommendation?

Dr. HOFFMAN. I cannot hazard a guess at this point.

The CHAIRMAN. OK.

Does HHS have greater expertise and resources than DOE to carry out these studies?

Dr. HOFFMAN. We would have to have a substantial increase in resources if this program were to be transferred.

In terms of the expertise both at NIH, CDC, FDA and the other PHS agencies, there is a large group of people with experience in radiation epidemiology. To look at the current DOE configuration, basically I think there is one person who manages all the contracts. We would have to see a large influx of personnel to, I think, make this a very viable kind of a program.

The CHAIRMAN. But in terms of your in-house people as opposed to DOE's in-house people as they exist today, you would have greater expertise?

Dr. HOFFMAN. We would have greater numbers, probably.

The CHAIRMAN. Dr. Hoffman, I noticed in your testimony all the different studies you have carried out at nuclear plants.

Is it not extraordinarily difficult to make the connection between some exposure and cancer? Those studies are extraordinarily difficult to do, are they not?

Dr. HOFFMAN. Yes, they are quite complex because many things can cause cancer, basically, and trying to separate out which of the exposures can induce a particular cancer is very difficult.

Secondly, in many cases the exposures are quite low. You need or require large numbers of populations to detect an increase in a certain type of cancer.

Third, you need very accurate assessment of the radiation doses going back in many cases many years when the exposure started, and those reconstructions can be expensive and can be a very complex activity.

The CHAIRMAN. The reason I asked the question is in my home state of Louisiana we have an area of chemical plants down along the Mississippi River. You are probably familiar with the studies that have been down there. The studies, a number of which have been talked about in the news media, have tended not to satisfy the people on either side.

Would you care to digress and answer why that is?

Dr. HOFFMAN. I think you are referring to the San Gabriel study? That is one of many that have been conducted down there.

The CHAIRMAN. Yes, that is the one.

Dr. HOFFMAN. Again, it is a very complex situation where you may or may not have various exposures to chemicals in that case or radiation in many other cases.

Trying to prove cause and effect in this kind of study is difficult, if not next to impossible, because of the nature of the kind of study that was done.

We are not conducting experimental studies basically. We are conducting observational studies. By the very nature, it is very difficult to prove unequivocally that you have cause and effect.

The CHAIRMAN. Would you tell me, by the way, about the methodology by which you are able to predict one case of cancer or three cases of cancer in a huge population over the next 10 or 20 years? How do they make that connection?

Dr. HOFFMAN. Well, there are many mechanisms. Let me use the example of radiation.

We know more about radiation than probably any other environmental carcinogen, and much of this stems from the atomic bomb survivors and various medical studies. Taking that data, we develop risk estimates; that is, having received a radiation dose of X number of rads, what is the likelihood that a person will develop cancer in 20 years.

By taking what are called risk co-efficient——

The CHAIRMAN. My question is how do you get those risk coefficient?

Dr. HOFFMAN. They come from basically epidemiological studies such as the Japanese A-bomb survivor studies. They come from actual observation.

The CHAIRMAN. From actual observation?

Dr. HOFFMAN. Right.

The CHAIRMAN. They make calculations flowing from the actual data. In other words, they do not have data on one, two or three. They have to make an assumption that the heavier dosages would give a linear exponent to smaller doses?

Dr. HOFFMAN. That is correct. A lot of our data come from studies which are exposed to fairly high doses and using a linear extrapolation; that is, if a population up here received X number of rads, what would the risk for a person down here in the low dose range be basically?

It is based upon this linear extrapolation or whatever shape of dose response you care to use that we make these predictions.

Let me emphasize we cannot make individual predictions but population predictions, basically. So if a population of X size was exposed to X number of rads of exposure, how many cancer victims would you expect in that population?

The CHAIRMAN. What is your personal confidence factor in that linear extrapolation?

Dr. HOFFMAN. Well, for some tumors the linear dose response model is quite good. If you look at breast cancer, solid tumors basically. For leukemia, it might be what we call a quadratic; that is, the risk drops off at the very high dose ranges.

I think there have been many, many studies over many, many years looking at this issue, and I think we have as much confidence as we can at least in the high dose exposures.

The area in which we are uncertain at this point occurs at very low doses of radiation.

The **Chairman**. That is what I mean. At the low doses, the confidence drops off?

Dr. **Hoffman**. The confidence drops off considerably, that is correct.

The **Chairman**. What is HHS' position on the provision of the Glenn bill which creates an advisory panel to review DOE's programs and make recommendation to the Secretary of Energy?

Dr. **Hoffman**. We have indicated that we would be willing to provide our expert advice to any panel which would be formed basically.

The **Chairman**. Do you think we ought to wait for the Secretarial panel, or should we go ahead with the provision for an advisory panel at this time?

Dr. **Hoffman**. Well, I think Admiral Watkins has already set in place two separate panels, one at the Academy of Sciences, which is currently constructed, I think, to offer oversight advice to DOE, and also the ad hoc panel which was just set up called the Secretarial Panel for the Evaluation of the EPI Research Program, which is currently making recommendations.

I would prefer that we wait until they have all made their recommendations and have had oversight and then go from there.

The **Chairman**. Thank you very much, Dr. Hoffman.

Senator Wirth.

Senator **Wirth**. Thank you very much, Mr. Chairman. Again, I want to commend you on having this hearing.

The **Chairman**. If I may interrupt, I would like to commend you for your interest in this. You have really been the spark plug on this whole issue.

Senator **Wirth**. Thank you very much. I want to quote you to show my gratitude.

The **Chairman**. That does not mean we will necessarily follow your advice.

Senator **Wirth**. Very well. I just wanted to quote you, which I always try to do. I always try to quote my chairman, talking about individuals inspecting themselves is a little bit like students giving themselves a grade in school.

I have been talking about a fox in a chicken house, and I am going to move away from that and talk about people giving themselves a grade in school. I think that is a much better way of putting it. Certainly this falls into the health arena.

As you know, Dr. Hoffman, I have for many years attempted to move the health research out of the Department of Energy and put it into your bailiwick, and that is one of the pieces of legislation in front of us, as you know.

I would like to start with you, if I might, Mr. Scannell.

Mr. **Scannell**. Yes, sir.

Senator **Wirth**. You were saying that DOE can inspect itself under OSHA. What other agencies do that?

Mr. **Scannell**. DOD has some GOCO's it inspects for compliance with DOD standards. The question as I understood it was can it be done. Sure, it can be.

Senator WIRTH. That was not my question. My question to you is what other agencies do that?

Mr. SCANNELL. Although all the agencies have some self-inspection and use——

Senator WIRTH. But none of them has it completely. So why should we have a separate set of rules for DOE and DOD that do not apply to all other Federal agencies?

Mr. SCANNELL. DOE has adopted the OSHA regulations.

Senator WIRTH. That is not my question. The question is why should we have a special set of rules that apply to DOE and DOD and do not apply to other Federal agencies?

There really is no good answer to that.

Mr. SCANNELL. Other than the law says under section 4(b)(1) of the OSHA Act that there is no——

Senator WIRTH. I realize that consistency is not necessarily the mother's milk of our endeavors.

Mr. SCANNELL. I agree.

Senator WIRTH. But I just want to make the point that this is unique and would be unique to DOE; is that correct?

Mr. SCANNELL. Yes, sir, except for some parts of DOD.

Senator WIRTH. Can you tell me what other agencies conduct their own research on health impacts on their employees? You might want to do that for the record. I do not know if you might explore that.

I do not think any other agency does that as well. Do you know what the justification is?

Do you know, Dr. Hoffman? Is there any other agency that conducts research on the health impacts on its employees?

Dr. HOFFMAN. Dr. Brown?

Mr. BROWN. I think DOD.

Senator WIRTH. DOD may do it. Now do you know why it is that DOE and DOD have this kind of unique status?

Again, the consistency of this escapes me. I just do not understand other than our attempt to cover this all up in some kind of national security umbrella, which really I think makes no sense given the credibility issue referred to so eloquently by the Chairman a little bit earlier, again to quote the Chairman in all of this.

Dr. Hoffman, let me jump to you. You say on page 7 of your testimony that DOE asked you to do some research for them. You talked about this in December of 1988 and onward.

Is it correct that the DOE came to CDC and asked them to do some work?

Dr. HOFFMAN. I am not sure. I only have my oral testimony here, not the written testimony.

The CHAIRMAN. The written testimony is on page 7 here. In December 1988, DOE transmitted the amended dose reconstruction report to it so that their work on radiation doses could be modified.

Dr. HOFFMAN. This actually came about in 1985 when Senator Glenn requested CDC to assess the health effects from the releases at the Fernald plant, and we agreed to do this pending a dose reconstruction effort which would provide us with radiation doses which was then initiated by DOE under their contract at Westinghouse.

Senator WIRTH. They asked you to do it. You came in as sort of an independent assessment because of your expertise?

Dr. HOFFMAN. Right. There were some problems with the dose reconstruction report. There were some releases which were not reported. We were ready to go public with the report in 1988, and at the last minute it was withdrawn because they found some untoward releases which may have influenced or may have changed our recommendations.

So it was decided at that point that we would do our own dose estimation effort at that time, and DOE gave us money and staff to do that. That is what we are doing right now basically.

Senator WIRTH. The thrust of this is that they came to you because of your expertise and respected objectivity and scientific capabilities?

Dr. HOFFMAN. More or less, yes.

Senator WIRTH. That is reflected on page 15 of your testimony. You say you have extensive responsibilities including undertaking health assessments, pilot studies of health effects, full-scale epidemiologic or other health studies, registries of exposed persons, health surveillance programs, health consultations and emergency response activities at DOE facilities. That is all expertise that is at CDC?

Dr. HOFFMAN. That is at ATSDR, that is correct.

Senator WIRTH. Now does DOE have any of that kind of capability?

Dr. HOFFMAN. I really do not know. I cannot answer that question.

Senator WIRTH. I just quote this. This is a ringing endorsement from HHS about the capability that exists in HHS and certainly does not exist in any way, shape or form at the Department of Energy.

You said that were this transfer to occur of health responsibilities that you would, in your words, have to have extensive transfer of resources to do the job. We would need a large influx of personnel.

Dr. HOFFMAN. That is correct.

Senator WIRTH. That was an accurate quote from you.

Does that mean if you just took the people at DOE and transferred them to CDC, that would be adequate to do the job?

Dr. HOFFMAN. That would not be adequate, we feel.

Senator WIRTH. You are saying that the personnel now at DOE are inadequate to do the job; is that right?

Dr. HOFFMAN. Historically, they had a very small staff monitor the human program basically.

Senator WIRTH. What you are saying is that we need a large influx of personnel, that they really do not have the personnel adequate to do the job; is that right?

Dr. HOFFMAN. That is correct.

Senator WIRTH. That is what we are saying.

Do you know how big the DOE staff is that is doing all the epidemiology research?

Dr. HOFFMAN. Currently? No, I really do not know the size.

Senator WIRTH. As the Chairman pointed out in one of his questions, as we all know it is very, very small. Sometimes we get an inflated number, and it might get up into the early 20s for doing this number. Clearly, the capability is not there as reflected in your statement.

Were this transfer to occur, you would need a significant influx of personnel?

Dr. HOFFMAN. That is correct.

Senator WIRTH. So the job just is not being done. I just point it out. I am not asking you to comment on this. I am just again for the record pointing out that the job is not being done.

Tell me, do you all do studies on employees but do not use the names of the employees? You study populations of individuals. Can you do that without exposing the name of those employees?

Dr. HOFFMAN. Let me ask Dr. Brown from NIOSH about the workers issues in terms of confidentiality.

Senator WIRTH. Just as a general principle. Let me just ask you as a general principle of scientific research.

Dr. HOFFMAN. Yes. We adhere very strongly to the idea of confidentiality of data base.

Senator WIRTH. You do all kinds of health research without any confidentiality problems; is that right?

Dr. HOFFMAN. Yes.

Senator WIRTH. So it is really a straw man to say you cannot do health research without compromising confidentiality?

Dr. HOFFMAN. It depends in the context in which that argument is placed.

Senator WIRTH. It is made all the time by DOE, that we cannot do the transfer because we are going to compromise the records of workers, which is absolute poppycock. You know as well as I do, and I am not saying that you made this statement, but health research goes on all the time on populations of individuals that you just leave a blank where the person's name is. You do a random sample with a lot of random blanks, and the idea that somehow you are going to compromise the confidentiality of individuals just runs against the grain of good scientific research, does it not?

Dr. HOFFMAN. We have had no problems in the past with using data of that nature.

Senator WIRTH. Let me ask you a couple of other questions, if I might.

When you get the results of CDC work, does the result of that feed into health and occupational safety standards, the work that you do?

Dr. HOFFMAN. In terms of NIOSH? Mr. Brown.

Mr. BROWN. Yes. The work that we do is many times done to feed into and give recommendations to the Occupational Safety and Health Administration for regulatory purposes.

Senator WIRTH. You have been pretty successful in establishing that kind of a record. They come to you for that very reason, is that right? They ask for your help and input into setting the standards; is that correct?

Mr. BROWN. Yes.

Senator WIRTH. Do you know, does that occur at DOE as the work that DOEs does? Is that built into the establishment of standards, do you know?

Mr. BROWN. I do not know.

Senator WIRTH. I can give you a quote from their own people. It says, "The results of epidemiologic research have not directly influence radiation protection standards development." They said themselves that there is no feedback back into the system.

Let me ask you about peer review, if I can. One of the other arguments, let me read you this quote from Dr. Shirley Fry of the Oak Ridge Associated University. She has expressed concern that if the health data was made available publicly or at other researchers, "the data might be too complex for outside researchers to understand and, as a result, misinterpretations might occur."

In other words, I gather from this quote that they are the only scientific people who would be able to do this kind of research. It would be too complex for people like yourselves.

How would you react to a statement like that as professionals at CDC? Let me read it to you again. "The data might be too complex for outside researchers to understand and, as a result, misinterpretations might occur. '

This is pretty insulting.

Dr. HOFFMAN. If that is a correct statement, I would think there are people outside of DOE who can analyze that kind of data.

Senator WIRTH. Is that what peer review is all about, too?

Dr. HOFFMAN. That is more or less part of it.

Senator WIRTH. That is one of the whole notions of peer review, is it not?

Dr. HOFFMAN. That is correct.

Senator WIRTH. Now you do pretty systematic peer review to make sure that people do understand the data and do see what is going on, so that you have a check on a steady basis?

Dr. HOFFMAN. That is correct, we do.

Senator WIRTH. Does the Department of Energy do that, do you know?

Dr. HOFFMAN. They do have oversight, that is correct.

Senator WIRTH. Do they have any kind of peer review in a systematic way?

Dr. HOFFMAN. I am not sure how systematic it is. I assume it is. They do have oversight committees at least at the National Laboratories.

Senator WIRTH. Dr. Goldsmith, who is the epidemiologist at DOE testifying on this front described his peer review process to the SPEERA panel meeting in Denver today as ad hoc. We just show this study to a few people and see what they think. That is not very convincing in terms of the peer review capability and kind of professionalism of the Department of Energy, is it?

Mr. Chairman, I have made my point, and I have got five other items here. The arguments that are made by the Department of Energy just do not hold any water, and the work that they have done is admitted by them to be sloppy at best. They do not have the people to do the job. They demonstrate a kind of arrogance by stating that the data might be too complex for outside researchers to understand.

We just see a pattern over and over and over again, Mr. Chairman.

I appreciate Dr. Hoffman being here, and I do not want to use you as kind of a straw man in all of this. I just wanted to compare as carefully as I could in a limited amount of time the professionalism which we see at CDC and the complete lack of professionalism at DOE to point out once again and underline very clearly, Mr. Chairman, why is it that we ought to move the epidemiological and related research out of DOE and put it in a health agency where it belongs.

Thank you very much, Mr. Chairman.

The **Chairman**. Thank you, Senator Wirth.

Dr. Hoffman, could you give us an estimate of the amount of resources you are going to need if we do make this transfer? You can do that in writing if you would like. We do not have to have a precise budget with exact numbers of positions, but I take it just transferring over the DOE experts under your control is not going to be enough if HHS gets epidemiological responsibilities here, you will need additional resources, and we would like to know the size of those resources.

Can you give that to us in writing?

Dr. **Hoffman**. I really cannot answer at this point, but I can get back to you in writing for the record.

The **Chairman**. Thank you.

On this question of confidentiality, the various bills here talk about independent research, qualified researchers giving the information to them, and I would certainly have no difficulty at all in saying that it ought to be given to them.

What is an independent or a qualified researcher?

Dr. **Hoffman**. A person, basically, who has no apparent or real conflict with the actual health effect study which is currently ongoing, someone appointed by a party outside of the involved agency, basically, somebody who can give a totally objective and scientifically credible review of that project.

The **Chairman**. Basically, anyone who fits that mold of being a credible scientist with a reason to want to do the research and no bias, all of those kinds of people or groups ought to have access to the data?

Dr. **Hoffman**. Yes, exactly.

The **Chairman**. Confidentiality with that kind of group would be no problem?

Dr. **Hoffman**. If they agreed to protect the confidentiality under the Privacy Act, yes, they could probably have access to the data.

The **Chairman**. How long would it take you? Admiral Watkins tells me he has no problem with this general concept of independent qualified researchers, and he is working on a plan right now to give this data out. Is that your understanding?

Dr. **Hoffman**. Yes. I think as proposed he would like to develop a data repository which would basically be overseen by the National Academy of Sciences, and they would review the proposals to use this data and make decisions as to who would be qualified to use this data basically.

The **Chairman**. Is that, in your judgment, a good way to do it?

Dr. **Hoffman**. Yes, I think it is.

The **Chairman**. Senator Wirth, any followup?

Senator **Wirth**. No, Mr. Chairman. Thank you.

The **Chairman**. Thank you, gentlemen, very much. We appreciate your testimony.

Next we have a medical community panel made up of Dr. H. Jack Geiger, the Arthur C. Logan Professor and Acting Chairman of the City University of New York School of Community Medicine, testifying on behalf of the Physicians for Social Responsibility's Task Force on the DOE nuclear facilities and also Dr. Ellen Mangione, Director of the Department of Disease and Environmental Epidemiological Division of the Colorado Department of Health, Denver, CO.

Dr. Geiger, we are glad to have you, and please proceed.

STATEMENT OF DR. H. JACK GEIGER, ARTHUR C. LOGAN PROFESSOR AND ACTING CHAIRMAN, CITY UNIVERSITY OF NEW YORK, SCHOOL OF COMMUNITY MEDICINE, ON BEHALF OF PHYSICIANS FOR SOCIAL RESPONSIBILITY'S TASK FORCE ON DOE NUCLEAR FACILITIES

Dr. GEIGER. Thank you.

My name is H. Jack Geiger. I am a physician. As has been noted, I am the Logan Professor and Chair of the Department of Community Medicine at the City University of New York Medical School. I am trained as an internist and epidemiologist.

I am also a member of the Three Mile Island Public Health Fund Scientific Advisory Board and have been for the past six years. That scientific advisory board for almost a decade has been responsible for the conduct of a more than $6 million research program not only on the environmental health effects of the Three Mile Island accident but, much more generically and not limited to the Three Mile Island area, generic studies of environmental monitoring, radiological disaster planning, and the long-term effects of low dose radiation exposure.

Indeed, if I remember correctly, Dr. Hoffman was one of our grantees for a major study and review of the issues that the Chairman was inquiring about having to do with risk co-efficient and how one related low level exposures and subsequent cancers in populations.

In that connection, and I would like to return to it a moment or two later, we have had at the Three Mile Island Scientific Advisory Board extensive dealings with the Department of Energy which have, from my point of view, been extremely disappointing from the point of view of proper scientific access to the kinds of data that are needed to get the answers to important questions.

I should add finally that I am a past president of Physicians for Social Responsibility and I currently co-chair the Physicians Task Force on nuclear weapons production and public health which comprises some 15 to 20 distinguished physicians, epidemiologists, occupational health specialists working to serve as an independent monitor and reviewer not only of the problems at DOE and the current state of epidemiological and occupational research and conditions but as to what ought to be done.

I am here today essentially in support of the Radiation Research Reorganization Act. I recognize that all three of the pieces of draft legislation are attempts seriously to address these issues. For the reasons that I will outline, I think the Radiation Research Reorganization Act does that most successfully.

Let me depart from the tedium of simply reading my testimony to you and make some oral comments and refer back to the written testimony at a variety of points.

I think we are here because we have to find ways of correcting what has been from the public health point of view really an intolerable and potentially dangerous situation for more than four decades. For that period of time, the Department of Energy and the Atomic Energy Commission before it have been charged, as has already been noted, both with the production of nuclear weapons and with the assurance of protecting the health of workers and surrounding populations from the hazards inevitably created by that production.

We know which of those mandates came first. Secretary Watkins himself has admitted for decades public health took a back seat, and even without his accurate and, I think, admirable recognition of that fact in public, we already knew that to be true; 500,000 plus curies released at Hanford, 50,000 of those deliberately without the informed consent of the exposed population, and even at this point the Department of Energy cannot tell us where those doses went, who was exposed. The conduct of the part that was an experiment and the conduct of the part that was due to negligence or incompetence include an inadequate dosimetry and an inadequate attention to epidemiologic followup.

At Fernald, some of that has been described. The basic situation there is that DOE and its contractors could not do the dose reconstruction. Their first attempt was followed by the discovery that they had left out major sources of emission, and the CDC finally decided that the only reliable way was to do the whole job itself.

One could repeat these stories at Rocky Flats, Savannah River and elsewhere.

The Chairman mentioned that there is no imminent danger. Let me identify what I think that dangerous situation is, sir, and the position I am going to take is, in fact, as a physician the only conservative position. The danger is that we do not know and no one can tell us with accuracy on the basis of the available data who has been exposed, what level of exposure constitutes a risk, where the exposures have been.

We are in a state of unacceptable ignorance with regard to what has taken place over the past 40 years. From a medical and public health point of view, that is an extremely troubling situation.

The conservative position is to say we need to worry, and we need to behave as if there are dangers until we can really assure ourselves that there are not.

The CHAIRMAN. If I may interrupt you at that point because I want to be sure I make this clear. I did not mean at all to suggest that I disagree with anything you had said, but it is a very big problem which needs to be addressed and addressed now. In the addressing of that problem, however, the danger is not that we need to shut down the plant immediately and say you cannot even run the plant; but rather, we need new systems both to identify those who have been exposed, the nature of the risk, and to devise a system to clean up.

Legislation which I have proposed would, for example, grant immunity from prosecution for a period of time from some of the laws that presently apply in order that we can devise a plan both to clean up and to comply with those laws. This obviously entails the judgment that there is not imminent danger to those in the neighborhood or those operating plants, an ongoing danger, because if there was we would say we have to shut the whole thing down immediately.

I just wanted to make it clear that I agree that it is clearly something that cannot be allowed to continue. We must devise systems to both cure the effects of the past, ascertain what the nature of the exposure is and the degree of it, the public health standards which it has violated as well as devise systems for the cleanup of that which has already been exposed and polluted.

I just wanted to make that clear.

Dr. GEIGER. I do not think we are in essential disagreement. I think we are discussing what are the best ways to accomplish that task.

We could and should have known much more about the magnitude and nature of the problems a long time ago. I clipped from the New York Times on Saturday the obituary of Dr. Harold Knapp, who was the scientist then working for the Atomic Energy Commission who in 1963 wrote the report on the deaths of those 20,000 sheep in Nevada and Utah and concluded that a substantial number of infants had been exposed to dangerous levels of radiation when they drank milk from cows that had eaten contaminated grass. The report was suppressed by the Commission.

That is an intrinsic problem and, to some extent, it continues as long as DOE has exclusive access to all kinds of basic data that it and the AEC have collected over these years.

We have dealt with this problem. You have quoted Shirley Fry. We at the Three Mile Island Scientific Board held an international conference which was attended by, among others, people from DOE as well as by radiation biologists and scientists from around the world, some of the most distinguished people in the field, and virtually unanimously including the DOE they concluded that the best single population data available for the answer to this question as to the biological effects of low dose ionizing radiation, is it linear, is it quadratic, what happens below the curve, the best possible population for the study of that question and getting better answers were the 40 years of records totaling some 600,000 workers at the AEC and DOE.

So we gave to three very distinguished researchers a grant to examine that data for that purpose, and we have had two years of the fiercest resistance from DOE to letting anybody else have access to that data.

Shirley Fry's comment that it would be too complex for anybody else to understand, statements that they were not really agency records, statements that they did not have them, statements that it would violate privacy agreements when there were clearly personal identifiers removed, an endless shifting ground, and I am talking about statements made in deposition because we filed a Freedom of Information Act lawsuit. These are simply not off-the-cuff comments.

[The prepared statement of Dr. Geiger follows:]

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H. JACK GEIGER, M.D.

TESTIMONY IN SUPPORT OF THE RADIATION RESEARCH REORGANIZATION ACT

PRESENTED BEFORE THE
SENATE ENERGY AND NATURAL RESOURCES COMMITTEE

NOVEMBER 13, 1989

Mr. Chairman:

My name is H. Jack Geiger, M.D. I am the Arthur C. Logan Professor and Chair of the Department of Community Medicine at the City University of New York School of Medicine. I have training in internal medicine and epidemiology.

I am also a member of the Three Mile Island (TMI) Public Health Fund Scientific Advisory Board. For almost a decade, the Fund has been responsible for the conduct of a $6 million research program on the environmental and health effects of the TMI accident and generic studies of environmental monitoring, radiological disaster planning, and the long-term effects of low-dose radiation exposures.

I am Past-President of Physicians for Social Responsibility (PSR) and currently serve as Co-Chair of PSR's Physicians Task Force on Nuclear Weapons Production and Public Health. The Task Force is comprised of distinguished physicians and epidemiologists, radiation scientists, and occupational medicine specialists, many of whom have long and substantial experience with health problems at DOE facilities.

I'm here today in support of the Radiation Research Reorganization Act, a proposal which I believe to be one of the most important steps Congress can take now to secure public health and safety many decades into the future. In addition to answering your questions about the details of this proposal, I also want to explain its importance in relation to the crisis at the DOE weapons facilities from the perspective of a medical professional concerned about public health.

The problems at our nation's nuclear weapons production facilities have convinced me of the need for major statutory changes in the responsibilities assigned to the Department of Energy and the laws that govern operations within the nuclear weapons production complex.

There is an inherent conflict-of-interest at DOE: one bureaucracy has been given both the assignment of producing nuclear weapons and protecting the public health against hazards stemming from that production. It has not worked. This situation has led to a "culture of secrecy" within the department and insufficient regard for the protection of human life and the environment.

The Secretary of Energy has said publicly, in an admission I consider bold and long-overdue, that for decades public health has consistently taken a back seat to weapons production. The Radiation Research Reorganization Act is an important step towards putting public health first, where it belongs. A definition of national security that is restricted to the stockpiling of nuclear weapons and that fails to include the health of the American people and the protection of the American environment is tragically flawed.

DOE WEAPONS FACILITIES: A THREAT TO THE PUBLIC HEALTH

From a medical perspective, the problems of accidents, mismanagement, sub-standard health and safety practices, irresponsible waste disposal, and radioactive and toxic releases into the environment at Savannah River, Rocky Flats, Hanford, Fernald, and other facilities constitute a threat to the public health. I am not asserting that thousands of lives are definitely in immediate danger -- it is an threat in the sense that we do not know the scope of the environmental and safety problems and the extent of the risks they pose to thousands of Americans.

We are just now beginning to see how extensive these risks actually are. Published reports and disclosures of environmental and occupational health data over the last few years suggest that thousands of workers at Department of Energy nuclear weapons production facilities and people in neighboring communities may have been exposed to unacceptable, dangerous levels of radiation and toxic chemicals. I will describe some examples of these shortly.

For those individuals who may have been overexposed, "secondary prevention" or early detection of disease may still be possible if the DOE will drop its cloak of secrecy and allow qualified outside experts to help. The health of many people depends on identifying the individuals or populations that have been overexposed.

More important are the revelations about continuing risk of exposure in and around the DOE facilities. Radiation and toxins continue to contaminate the environment and the workplace, and people still live and work in areas that may have been contaminated in the past. Until there is clear evidence that these risks have been effectively managed, DOE and public health officials must act as if there is a continuing direct threat to people and the environment. From a medical and public health perspective, this is the only responsible course of action.

DOE SECRECY AND THE PUBLIC HEALTH

We cannot now quantify the amount of environmental degradation that nuclear weapons production has already caused, or tell you in any complete way how much the health of workers and citizens has already been affected. We cannot tell you what the impact of nuclear weapons production will be on future health.

Much of the information we need to begin to develop a comprehensive picture of the health and environmental impacts of nuclear weapons production activities is being withheld by the DOE, or has been classified by the federal government, or was never collected at all. Nearly all government-financed studies into the effects of radiation on workers within the nuclear weapons production complex, or populations surrounding the major facilities, have been conducted by the DOE through contractors.

The Department of Energy, and before it the Atomic Energy Commission, has withheld almost all information about radiation releases and occupational health at nuclear weapons plants, using "national security" to defend its non-disclosure policy. Recently, DOE scientists have suggested that it might not be in the "public interest" to release these data. Dr. Shirley Fry, of the Oak Ridge Associated Universities has expressed concern that the data might be too complex for outside researchers to understand, and, as a result, misinterperetations may occur. Outside researchers she said, will continue to need the assistance of "people who've had experience with the data" in order to use it. [Hearing of the Secretarial Panel for the Evaluation of Epidemiological Research Activities, 9/13/89.]

In my judgment, misinterpretations of scientific and epidemiological data occur when there is insufficient peer review and scrutiny. Public and scientific misinterpretations of the health effects of nuclear weapons production are more likely to occur if the relevant data remains obscured and is withheld from qualified, independent, non-governmental researchers than if it is made sufficiently accessible.

Many of these studies have not been released. None of the data accompanying existing studies, commonly called "data analysis files," are currently available to independent researchers. Without the full disclosures of nuclear workers' health records, for instance, independent analysts cannot determine whether the DOE's health studies are credible, and whether the radiation research program has been used to identify real health threats within the weapons production complex. I should add here that such disclosure need not jeopardize workers' individual privacy. That privacy can be protected by removing personal identifiers from the health records being examined in a scientific study.

Medical professionals and the general public can understand why nuclear warhead designs should stay secret -- we cannot understand why studies and data on the health impact of low-level ionizing radiation should remain secret. There is no "national security" justification for keeping this research in the dark. Ironically, the years of secrecy can be held responsible for the current shutdown of facilities, and the potential closure of others, where safety problems and health risks were ignored.

According to the sworn affadavits of DOE contracted researchers, all data for completed studies and most data for ongoing studies has already been entered. If that is true, these data, the "integrated data base files," could be copied at very little cost and made available more rapidly.

Through Senator Wirth's proposed transfer of all radiation health research to the Department of Health and Human Services

(HHS), much of the data could be made available to qualified researchers more rapidly and at smaller expense. Problems with data entry indicate serious shortcomings in the DOE's management of this program. HHS has experience and established procedures for handling and storing similar health records.

DOE'S LOSS OF THE PUBLIC'S CONFIDENCE

DOE's culture of secrecy and recent information about the operation of its facilities, such as the FBI investigation at Rocky Flats this summer, have produced another crisis -- a crisis of public confidence in the DOE and its ability to be forthright about the dangers and risks of nuclear weapons production.

Until very recently, the public has not had information, explanations, or accountability from the DOE -- just simple reassurances that nuclear weapons production does not threaten public health or safety, period. Secrecy protected DOE from scrutiny. But secrets are difficult to keep, and forty years of secrecy are taking their toll. One very real cost of DOE's policies has been a total loss of public trust. People just do not believe DOE's reassurances that the continued operation of nuclear weapons facilities does not threaten their health and safety. And why should they? Those reassurances ring hollow after decades of unsafe operations, accidents and contamination that were kept secret from the public.

Secretary Watkins himself has stated that he cannot trust the information he receives from subordinates within DOE. If the Secretary cannot trust the information he gets, how can we expect the public, and especially those people living around facilities like Rocky Flats and Fernald, to believe the findings and policy recommendations of DOE health program managers and researchers?

If public confidence in DOE judgments about health and environmental risks from nuclear weapons production is not restored, public support for the continued operation of those facilities is in great jeopardy. And right now, the DOE is not in a position to reestablish quickly the public trust that allows it to render qualified, credible judgements about environmental, health, and occupational safety.

THE PROBLEM OF CONFLICT-OF-INTEREST AT DOE

It appears to me, Mr. Chairman, that the problems of secrecy and the loss of public confidence are the result of the fundamental conflict of interest that exists at DOE -- that is, its dual mission to research, manufacture, and test nuclear weapons and to protect the public health from the risks involved in that process. Time and time again environmental, health, and safety concerns have been subordinated to weapons production priorites.

I will cite just a few very clear examples. On June 6, 1989, the FBI raided the Rocky Flats Plant. Among the FBI's allegations was that Rockwell and DOE had repeatedly stated to the public and certified to government agencies that Rocky Flats was in compliance with Federal and State environmental laws. FBI investigators had allegedly discovered that Rocky Flats managers had been operating the Building 771 incinerator in December of 1988, despite public assurances that the building had been shut down since the previous October for safety reasons.

A second example is the $73 million settlement of the Fernald, Ohio residents' class-action suit, in which the DOE acknowledged for the first time that a nuclear weapons plant might have harmed people who lived nearby. But the Feed Materials Production Center (FMPC) continues to be in violation of several major environmental laws. DOE's own FMPC "Tiger Team" assessment, completed in August 1989, found that the facility does not meet: "... All requirements relative to Resource Conservation and Recovery Act; Comprehensive Environmental Response, Compensation and Liability Act; Clean Air Act; Clean Water Act; National Environmental Policy Act; or the conditions specified in the US EPA Region V Federal Facilities Compliance Agreement (FFCA), Ohio EPA Order (June 1987), and the Ohio EPA/DOE Consent Decree (December 1988)." The facility was also found to be operating in violation with DOE safety regulations.

The case of the Fernald residents against DOE and former FMPC contractor National Lead of Ohio raises another, very serious case of conflict-of-interest. On September 29, Judge Arthur Spiegel ruled that the Fernald residents' class-action suit settlement was fair and that residents are still free to file separate legal claims in the future. DOE had argued that they should not be able to file future claims. Their ability to file any such claims in the future depends of course on their ability to prove a cause and effect relationship between their health problems and FMPC contamination. However, if the DOE retains sole access and control of the relevant health and environmental data pertaining to this issue, they will conceivably be able to limit the residents' access to it, and lessen the possibility of future lawsuits.

INSUFFICIENCY OF DOE'S EFFORTS TO ADDRESS THE EMERGENCY

In public health, the speed and extent of the response must reflect the gravity of the problem. To his credit, Secretary Watkins has outlined some steps toward solving the serious environmental, safety, and health problems plauging the Department of Energy nuclear weapons production complex. However, his response to this situation falls short of the major public health mobilization that we need.

For example, according to the DOE's Radiation Research Program manager, Dr. Robert Goldsmith, less than $7 million of the $26 million provided in the DOE budget for the Epidemiology Program is actually being spent on epidemiological research. And of that

$7 million, only $3.7 million is used for the Health and Mortality study of the 600,000 past and present atomic workers. Furthermore, the entire Epidemiology Program, its health studies and all, is administered by just one man, Dr. Robert Goldsmith. Dr. James Ruttenber, of the Centers for Disease Control, can tell you that the DOE's budget and staffing for this vital health research is inexcusably inadequate.

DOE's ability to translate the research on the 600,000 past and present nuclear weapons production workers into meaningful public policy is also inadequate. According to Dr. Goldsmith, "radiation standards are set by international and national bodies that would use the publications [of the Epidemiology Program]. Other than that, there is not much translation of the results into anything." [Hearing of the Secretarial Panel for the Evaluation of Epidemiological Research Activities, 9/13/89.]

Secretary Watkins claims that mismanagement and a shortage of qualified environmental, safety, and health personnel are the key causes behind his department's problems. I fully agree that these have been contributing factors, but better management and personnel cannot alone solve the crisis of the nuclear weapons production facilities.

It seems apparent to me that under the administration of DOE, the radiation health studies program is not receiving adequate attention and resources. This is unfortunate but not very suprising since DOE faces so many other enormous and expensive tasks, including the production of nuclear weapons and a risk containment responsibility at its facilities that will cost well over $100 billion over the next 20 years. Competing budget and resource priorities and the Department's fundamental conflict-of-interest make clear to me that the Department of Energy is not up to the task of addressing the public health emergency posed by the production of nuclear weapons.

Secretary Watkins has told this Committee that he would prefer that epidemiological studies remain under the auspices of DOE. He asserts that "line management" must remain accountable for occupational safety and health at DOE nuclear weapons production facilities. I agree that on-site managers must be held accountable for production at the facilities according to the environmental, safety, and health standards set by law. But it is imperative that officials from an independent health agency are put in charge of the separate task of assessing the health risks associated with that production. As much as the Secretary sincerely feels that DOE should retain the responsibility for the task of examining the health risks, the interests of the public are best served by transferring these studies to an experienced health agency that has no bias toward a favorable outcome.

TRANSFER THE RADIATION HEALTH STUDIES PROGRAMS

Mr. Chairman and members of the Committee, we need to respond quickly to the potential threat posed by nuclear weapons production with a major public health mobilization. This requires adequate funding, independent research, and more open access to the relevant data. We can most effectively accomplish this by transferring responsibility for radiation health effects research from the Department of Energy to the Department of Health and Human Services. In addition:

* HHS must be granted immediate access to all relevant DOE records and data.

* HHS must be empowered to develop reliable data on radiation releases and exposure levels.

* Adequate funding must be provided to enable HHS to carry out this mission.

* HHS must work in cooperation with other agencies, such as EPA, that have oversight, enforcement, responsibilities at the DOE nuclear weapons production facilities, in order to ensure that the data obtained by these agencies are applicable to public health studies.

* A "blue-ribbon" advisory panel should be created to assist the Secretary of HHS. The panel should consist of independent experts from State public health agencies from States with a nuclear weapons facility within their borders, organized labor unions active at DOE facilities, and public interest groups. The panel should be empowered to recommend program priorities and actions to be pursued.

CONCLUSION

What we need is a thorough and critical independent review of all pertinent data by the broadest possible spectrum of government and independent researchers -- the Radiation Research Reorganization Act is the way to meet that need. The long history of problems and shortcomings in the DOE radiation health research program argues for transfer of that entire program to the Department of Health and Human Services, whose agencies have greater experience and integrity in this area.

Four years ago, the Nuclear Regulatory Commission (NRC) testified in support of this same legislation to transfer the radiation research program to HHS. NRC stated that "public health oriented agencies, such as the NIH, are best suited to perform radiation effects research including epidemiological studies." [Letter from NRC General Counsel Herzel H.E. Plaine to Senator William Roth, Hearings of the Health and Environment Subcommittee of House Energy and Commerce Committee, November 13, 1985, Hearings #99-45 Part I]. Mr. Chairman, I must agree.

I am very encouraged by the statements that Secretary Watkins has made in recent months, and by his willingness to look at DOE activities that have not received scrutiny for many years. But I am convinced that changing the culture at DOE, as the Secretary has pledged to do, requires something more. The only way we can be certain that the culture change takes place in the area of health research, and that it endures the tenure of Admiral Watkins, is to place those responsibilities outside the DOE, and open up radiation health research to public scrutiny, thereby removing the fundamental conflict-of-interest problem.

If Congress would now move all responsibility for radiation health research to the Department of Health and Human Services, with provisions for release and declassification of data, the agencies under HHS, such as the National Cancer Institute and the Centers for Disease Control, could provide relevant expertise and guidance on future research and public health policy. If the health records of nuclear weapons production facilities workers and records of environmental contamination can be made available promptly to independent HHS researchers, they would have access to the most important set of data on the effects of low-level ionizing radiation on human health. The findings of HHS researchers about the effects of low-level ionizing radiation would add significantly to our medical knowledge and enjoy great authority, because they would have been subjected to professional review and public scrutiny.

Mr. Chairman and members of the Committee, if radiation health research can be supervised and coordinated by an agency with relevent experience, an agency not tainted by decades of malfeasance and duplicity, I believe that we may yet be able to restore public confidence that our own government is telling the truth to its citizens about the risks from nuclear weapons production facilities. And most importantly, we will have the tools necessary to begin to understand those risks.

The **Chairman**. Dr. Geiger, you say you have funded this study but have been unable for 2 years to get the information?

Dr. **Geiger**. That is right.

The **Chairman**. When you say you——

Dr. **Geiger**. That is Three Mile Island Public Health Fund has funded three distinguished investigators.

The **Chairman**. What is Three Mile Island Public Health Fund?

Dr. **Geiger**. Three Mile Island Public Health Fund was established as a result, I believe, of the class action settlement of one of the suits around the Three Mile Island reactor accident establishing a fund of some $6 to $8 million for scientific research into the health and environmental effects of that accident and to the questions generically of environmental monitoring, biological effects of low does radiation and the like.

The **Chairman**. Certainly the National Academy of Sciences, if given the charge to manage this data, would give it to them, I would think?

Dr. **Geiger**. Let me jump ahead and turn to this issue of who should have access to the data and how should it be done. Just, before I come to that by way of getting to it, describe the situation that I think we face and why access to this data and other aspects of this legislation are so important.

Senator Wirth, I am going to stay with the fox and the chicken coop as an image. I think the fox has been guarding the chicken coop and doing it in relative secrecy. I think the fox has claimed the exclusive right to study mortality in the chicken coop and to report on it. I think the fox has been setting health standards for the chicken coop in its environment, and I think the fox has claimed sovereign immunity when the chickens finally sued. That is an unacceptable situation from both a public health and a moral point of view.

I testified before the SPEERA panel. I listened to other DOE testimony before the SPEERA panel. I read the transcripts of the first SPEERA panel hearing, and some of my colleagues are testifying today in Denver.

Things that became clear there included the relative understaffing and inadequacy of the DOE epidemiological effort at present, the fact that research results by Robert Goldsmith's own statement were not translated into policy, an admission that turned up in Chicago that the DOE at present has one occupational health physician to supervise 45 contractors, and that only some $7 million of the $26 million allocated have been spent on new epidemiologic research in a recent period of time.

Senator **Wirth**. What ever happened to the other $19 million?

Dr. **Geiger**. It was not explained where the rest of that money had gone or, indeed, if it had been spent.

I have concerns even about what has been said about the constitution of the panel; that is, if it is true that it is proposed to cost $30 million and take six years. Records on at least 300,000, the so-called integrated data base files of the DOE workers are already in immediately accessible and transferrable form with the personal identifiers removed. They could be made available to other investigators within weeks.

I do not think we have to wait for that, or should, for that repository to be completed before we begin independent scientific research on all of these questions.

I think, indeed, Health and Human Services has far greater resources, expert resources in the CDC and NIOSH, OSHA and elsewhere than does DOE and is free of this inevitable question of a conflict of interest of internal research and grading yourself.

I have reservations about the process of going through a National Academy of Science panel to see who has access to this data provided personal identifiers are removed.

I can sit down right now on my letterhead and send a check for $500 to cover the cost of the tapes, and I can get United States Census data tapes. I can get National Health and Nutrition Survey tapes. I can get Medicare tapes. I can get Medicaid tapes. All of these data were collected in the public interest by public agencies to answer questions of concern to the public without further ado.

No one has explained to me why this data on occupational exposure, morbidity and mortality among DOE workers or in surrounding populations, provided confidentiality is maintained, is any different.

The CHAIRMAN. This is on tape?

Dr. GEIGER. Yes, sir.

The CHAIRMAN. All this data is on tape?

Dr. GEIGER. We know for sure that some 300,000 of the worker data is in usable personal confidential personal identifier removed usable form and could be transferred within a week.

The CHAIRMAN. Transferred to?

Dr. GEIGER. To independent HHS or to the TMI scientists who are seeking access to it or to others.

The CHAIRMAN. It is not on tape?

Dr. GEIGER. It is either on disk or tape. It does not matter which. It is in available form, yes, 300 tapes.

The CHAIRMAN. It is not huge boxes of files?

Dr. GEIGER. No. It is in easily transferrable form. It is not on paper. It is on computer disks and computer tape and could be transferred.

Senator WIRTH. Without people's names?

Dr. GEIGER. The identifiers are removed.

Senator WIRTH. So there is not a confidentiality problem?

Dr. GEIGER. There is no confidentiality problem. This could be done starting tomorrow.

My position would be that the way science works and works best and always has is to permit the widest possible access to this kind of material, the widest number of analyses, the widest number of hypotheses, the widest number of kinds of research. That is how we find the answers to questions.

Senator WIRTH. You as outsiders would not be able to do so, according to Dr. Fry.

Dr. GEIGER. That is right.

Senator WIRTH. You would not be able to understand this or whatever.

Dr. GEIGER. That is simply not the case with regard to the data. It is not the case with regard to the complexity of the data. You heard Dr. Hoffman's response. There are literally hundreds of scientists in the United States, let alone around the world, who are competent to do these analyses.

Somebody talked about people doubting whenever this process, whether it was OSHA inspection or epidemiologic research, people not wanting to believe it was done right because of potential conflict of interest. That is again the conservative position. One should always doubt when one does not have independent investigators with no stake in the outcome one way or the other doing their best job of examining data. We believe that that is the way it should always be done in our best interest.

I know——

The CHAIRMAN. There should be no peer review at all?

Dr. GEIGER. Let me be very clear. Wherever somebody is applying competitively for grant funding, yes, there should be review as we have peer review of all HHS, National Academy of Science and other grant funding for qualifications; is the study designed reasonable and rational and the like.

For access to the data files, the integrated data base files and so on on the worker population, I for one fail to understand why it should be any different than for Census data or Medicare data or National——

The CHAIRMAN. I will tell you the reason why, the reason given; that is, the data could be misused to prove a result which could either greatly alarm the population or greatly reassure the population when the scientific method would not be correct.

Dr. GEIGER. Senator, that is exactly what would have been said before Galileo dropped the weights from the Leaning Tower of Pisa or before Copernicus said that the solar system ran a different way.

No one has the right to prejudge hypotheses, proposed methods of examination and the like and say, therefore, you cannot have access to the data because we disagree with the conclusions.

The CHAIRMAN. You judge the data and scientific method all the time on doing epidemiological studies, do you not?

Dr. GEIGER. Indeed where there is application for competitive grant funding. If somebody does a study without having gone through a peer review process and somehow gets it published, because you do have to go through a peer review process to get it published, then we all go to work and shoot it down. That is again the way science works. We do not give the agency that has the records or any other agency in effect the right to precontrol access to the data because we disagree with the hypothesis.

The CHAIRMAN. I think you all have made a powerful case that DOE has not done the right thing, but it is quite another thing to say that the National Academy of Sciences is going to be skewed in their overseeing of scientific method.

It seems to me if I were going to give the National Academy of Sciences, which I think does have credibility throughout the scientific community, to give them a charge and say make this as widely available as you can to any qualified, independent study groups, and I would add who present a plan to use this data in a scientifically respectable way, what would be wrong with that?

Dr. GEIGER. I agree that that is the process that should be used, the peer review process we have for competitive grant funding. I have serious concern about any agency even when as respectable as the National Academy of Sciences. I quite agree with you in my respect for them controlling access to data on the basis of a prejudgment about the hypothesis.

The CHAIRMAN. Let us suppose the National Enquirer wanted to get this data, got it, and a short time later came out with headlines, "Western Population of the United States to Die, Proven by Data".

Dr. GEIGER. I would agree with any requirement that said, look, you have to be on the faculty of a medical school or a research institution. You have to be an established scientist. I am objecting to the prejudgment of hypotheses or methods.

Let me illustrate with an example. When I was at the SPEERA hearings in Denver, the head of the Society of Health Physicists said 95 percent of the physicists in this society were satisfied with present radiation exposure standards and did not believe that any further research was necessary.

When it came my time to testify, I pointed out that there was a time when 95 percent of members of that society, a very distinguished society, did not think there was anything with prenatal radiation exposure and, indeed, had someone come to that group or some other group and said I want access to the given body of data because I have a hypothesis that prenatal exposure creates leukemia in children.

I would not have wanted anybody to say, well, I do not think this is a sensible scientific hypothesis and, therefore, you cannot get access to the data. We would have missed out on an extraordinarily important finding.

I agree, the National Enquirer should not be able to get Medicaid or Census data, either, as far as I am concerned for purposes of research.

Senator WIRTH. Wait a minute. Wait a minute. Who are we to decide?

If I might, Mr. Chairman, who are we to decide who is legitimate and who is not legitimate? It seems to me that is a fundamental abridgement of what the first amendment is all about and is meant to protect.

We have information out there and people have access to that particularly in the scientific community, and I just do not understand how even you, Dr. Geiger, can sit there and say that the National Enquirer could not have access to Census data. Why not? What is wrong with the National Enquirer just as much as the New York Times having access?

Just because you happen to think the New York Times is legitimate and the National Enquirer is not does not mean that they cannot, if it is public information, have access to that public information.

Is that right?

Dr. GEIGER. I agree. I think this is and should be public information.

Senator WIRTH. That is the point.

The CHAIRMAN. The Census data is by its nature public.

Senator WIRTH. I just wanted to step in at that point when he was saying they should not have access to that either.

Now if you get to the next step, if you have this kind of data, 300,000 case studies on tape, and there are no names involved in it, and there are all kinds of other medical data that is available on tape, you plug into the National Institutes of Medicine and the National Enquirer or the New York Times or Dr. Geiger or the State Department of Health can get that information; right? There are no limitations on that, are there?

Dr. **Geiger**. No.

Senator **Wirth**. Now why should there be limitations on this versus other data?

Dr. **Geiger**. The issue that was raised is that it would be misused. Whatever is overlooked in that, whatever misused means, that is why I am giving——

Senator **Wirth**. Who is making a judgment as to misuse if the National Enquirer prints it?

Dr. **Geiger**. That is right.

Senator **Wirth**. They misuse pictures of people. They misuse the English language, for God's sake.

Dr. **Geiger**. The best way to get at the truth is to shoot down misuse but not to cut it off at the front end is what I am trying to make clear. That is why I cited Galileo, Copernicus or Alice Stewart.

Let me address one final issue in this testimony, and that has to do with the question of the DOE's promise to reorganize and Secretary Watkins' promises to change things around but to leave things essentially in the control of the Department of Energy.

Secretary Watkins earned an enormous amount of respect in the medical community on the AIDS Commission, and I do not think Secretary Watkins' integrity is at stake here or even at issue here. We are talking about institutional and structural arrangements and structural conflicts of interest that would last long beyond Secretary Watkins' tenure.

This is a conflict of interest that makes the DOE the fox in this situation. The last time the fox promised to clean up the act that I can remember was in Little Red Riding Hood, and I am not prepared to accept as a public health measure any internal promise that it can safely be left to an organization for self-monitoring or for control of access.

I think we have to make institutional changes. I think the appropriate change is the transfer of all of these issues. Everything we have been talking about relates to health. There is one government agency that has primary responsibility for health, and that is the Department of Health and Human Services, including CDC, NIOSH and all the rest.

Following what has been said here, to make it clear, I feel it would be important to specify that access to the data and use of the data would not be restricted to HHS scientists alone, which is still government, but to the scientific community as broadly as possible.

This will not only serve better to protect workers at DOE facilities, surrounding populations, the environment, but it is probably the best way for us to get better answers to this question of what really are the risk co-efficient at low doses, what is the biological effect of low dose radiation, and to put in the public scientific domain the kind of controversy that will get us to the truth.

The **Chairman**. Thank you very much, Dr. Geiger.

Dr. Mangione.

STATEMENT OF DR. ELLEN J. MANGIONE, DIRECTOR, DIVISION OF DISEASE CONTROL AND ENVIRONMENTAL EPIDEMIOLOGY, COLORADO DEPARTMENT OF HEALTH, DENVER, CO

Dr. **Mangione**. Thank you, Mr. Chairman. My name is Dr. Ellen J. Mangione, and as you mentioned previously I am a Division Director for Disease Control and Environmental Epidemiology at the Colorado Department of Health. I am also an assistant clinical professor in the Department of Preventive Medicine and Biometrics at the University of Colorado Health Sciences Center. I am board certified in internal medicine and preventive medicine and hold a degree in epidemiology.

In my capacity as Division Director for Disease Control and Environmental Epidemiology at the State Health Department, I have responsibility for investigation and control of infectious and noninfectious diseases as well as investigation of actual or potential risks to the public from hazardous environmental exposures.

I am also a member of the Health Issues Subcommittee of the Rocky Flats Monitoring Council, and I have been co-author of the agreement in principle entered into in June 1989 between the U.S. Department of Energy and the State of Colorado.

I am one of approximately 1 million Coloradans who live within 20 miles and downwind of the Rocky Flats nuclear weapons plant. I am here today to answer some questions and to try to step back a little bit from the issues that we have been talking about in terms of epidemiologic perspective and what actually would be the criteria that I would look for in terms of whatever agency should end up having this responsibility to ensure that we can adequately answer the questions about worker safety and, by extrapolation, community safety as well.

I would like to begin by just talking a little bit about epidemiology and, really, what it is and what I think it is not. Epidemiology is the study of disease occurrence in human populations and the factors that influence these patterns. It is the who, where, when, the persons affected by disease, where the disease occurs and the time of disease occurrence.

Epidemiology is really based on the assumption that diseases do not simply occur randomly but, in fact, there is some association or some cause that can explain its occurrence. It is those assumptions that allow us to go from epidemiology to begin taking steps to prevent the occurrence of disease, but until we have understood or at least sorted out some of those factors that account for the pattern, it is really basically impossible to put prevention into effect.

In such studies of human populations, we are really unable to control behavior as we can in the laboratory; therefore, epidemiologic studies are difficult, they are expensive, they are lengthy, they are frustrating and sometimes limited in their conclusions, as we mentioned previously.

Yet, they have the capability of telling us more about the occurrence of disease among humans than any other tool that we have available to us, and this really gets back to a point that was discussed previously with Dr. Hoffman. It is those epidemiologic studies, well designed and well conducted, carried out to their conclusions, which, in association with various appropriate assumptions, form the basis for our judgments of risk in other populations. We try to learn what we can from certain circumstances and then extrapolate to other circumstances that are similar in many ways.

[The prepared statement of Dr. Mangione follows:]

Testimony of Ellen J. Mangione, Director, Division of Disease Control and Environmental Epidemiology, Colorado Department of Health, before the U.S. Senate Energy and Natural Resources Committee, November 13, 1989.

Thank you, Mr. Chairman. My name is Ellen J. Mangione, M.D. I am the Director of the Division of Disease Control and Environmental Epidemiology, Colorado Department of Health and Assistant Clinical Professor in the Department of Preventive Medicine and Biometrics, University of Colorado Health Sciences Center. I hold board certification in internal medicine and preventive medicine and a masters degree in epidemiology.

In my capacity as Division Director of Disease Control and Environmental Epidemiology, I have responsibility for investigation and control of infectious and non-infectious diseases as well as investigation of actual or potential risks to the public from hazardous environmental exposures.

I am a member of the Health Issues Subcommittee of the Rocky Flats Environmental Monitoring Council. I am also co-author of the Agreement in Principle entered into June 16, 1988, by the U.S. Department of Energy and the State of Colorado. I, along with nearly one million other Coloradans, live within 20 miles and down wind of the Rocky Flats Plant.

I am here today to answer any questions and to describe for you, from a state health department and epidemiologic perspective, steps necessary to effectively conduct epidemiologic research which will prove helpful in identifying factors which impact the health and safety of workers and the public living in the vicinity of Department of Energy facilities.

Let me begin by defining epidemiology. Epidemiology is the study of the patterns of disease occurrence in human populations and of the factors that influence these patterns. It is the Who? What? Where? and When?, the persons affected by disease, where disease occurs, and time of disease occurrence. Epidemiology is based on the assumption that disease is not random and that its causes are identifiable and preventable. The goal of epidemiologic research is to determine factors which may cause disease: recognition of these factors is the first step in prevention. In such studies of human populations, we are unable to control behavior as we can in laboratory studies. Therefore, epidemiologic studies may be lengthy, arduous, expensive, labor intensive, frustrating, and limited in their conclusions. Yet, they have the capability of telling more about human disease than any other tool available to us. Before quality epidemiologic research can be undertaken, however, several issues must be addressed.

First and foremost, there must be an organizational commitment to the importance of epidemiology. Commitment means willingness to designate these studies as an organizational priority which in turn indicates a willingness to provide adequate and stable funding to a group of qualified experts and support staff.

With this commitment, must go the appropriate "culture." By appropriate "culture" I mean an an attitude of openness and receptiveness to the role of epidemiologic research and conclusions drawn from it. Epidemiologic data and findings must play an integral role in policy and decision making at the highest levels.

Second, data must be collected in a consistent and standardized manner so that information from one individual to the next and one facility to the next, is of comparable content and quality. To accomplish this, a "minimum data set" must be developed. A minimum data set is a group of variables, pieces of information which are potentially important in characterizing the occurrence of disease. Some of the variables in a minimum data set on workers, for example, might include age, dates of employment, smoking habits, and job description, as well as information on medical screening and exposure monitoring information on each individual worker. Injury and illness logs and routine worker health surveillance information should likewise be included.

It is called a "minimum" data set because it is the very least required. For example, if our goal is to evaluate the occurrence of lung cancer among workers at a DOE facility, it is critical that we have information on smoking since both radiation exposure and smoking are risk factors for the disease. Anything less than this would make it impossible to do meaningful epidemiologic studies. Development of a minimum data set is akin to the way in which health departments have collected and maintained for decades, records such as birth and death certificates and reports of infectious and non-infectious diseases, thus demonstrating a commitment to the importance of epidemiology.

Third, the information in the minimum data set should be as complete and of the highest quality possible. The moratorium on the destruction of health data by the Department of Energy and its contractors should be extended. In addition, data entered into the data set must be carefully edited. Errors introduced into the data anywhere from collection to data entry may compromise the ability of epidemiologists to draw meaningful conclusions about the presence or absence of disease in the population under study.

Fourth, a decision must be made as to who will collect and hold the information. This decision is critical since the willingness to collect and hold the information implies an organizational commitment and willingness to provide necessary resources to adequately support these activities.

Fifth, epidemiologists must have access to the minimum data sets and health records, which must be guaranteed in law or regulation. Because there is concern about protecting the confidentiality of records, a mechanism must be developed which provides for protection of confidentiality, yet allows epidemiologic research to proceed. This is an issue which we in state health departments face daily. Research is possible while protecting the anonymity of those whose records are being studied. Colorado, as well as other states, has developed a mechanism similar to the National Institutes of Health Committee on Protection of Human Subjects to address these concerns. Confidentiality must not be used as an excuse to prohibit access to information on the part of qualified researchers. Similarly, we must recognize the need to protect data which has national security implications. Yet, the decision to exclude data from access must be reviewed and reconsidered routinely, in order to assure that such protection continues to be necessary and outweighs the benefits of making the data available.

Sixth, no agency or individual should have a monopoly on epidemiologic research at or around DOE facilities. Instead, we must consider ways in which others can be stimulated to ask questions of the available information which can further our understanding of risks and disease occurrence. Scientific credibility and political and social acceptance of conclusions are enhanced by allowing independent scientists to examine data from different perspectives. Grant funds should be made available for competitive proposals. These proposals should be awarded on the basis of ratings given by an independent, scientific panel, perhaps under the National Institutes of Health or National Academy of Science, which is balanced in its representation of various groups and agencies with expertise in epidemiologic research. This process must be formalized and widely distributed in a way which encourages research centers across the country to take an interest in epidemiologic research as it pertains to DOE facilities. Special relationships with institutions and agencies which allow awarding of funds independent of the review process should be viewed with caution.

Seventh, a system for providing feedback on epidemiologic findings to workers, facility medical directors and industrial hygienists, policy makers and the public, must be established.

Ideally, researchers whose primary focus is worker health will work hand in hand with those whose focus is on community health. While these foci require slightly different approaches, they have a sufficient number of issues in common, that they should not be divorced from one another.

Finally, at every step of the way, there must be meaningful involvement of experts outside the "committed" agency capable of making substantive recommendations to that agency. Only in this way will the results of the studies be viewed as credible by scientists and the public.

In Colorado, under the Agreement in Principle, we have made an organizational commitment to evaluate the epidemiologic impacts of the Rocky Flats Plant. We have begun this process by assembling the first of two groups of expert advisors from outside our agency. Shortly, we will begin development of a database. We anticipate that this database will serve as the foundation for epidemiologic research on the impact of the Rocky Flats Plant. We will incorporate our findings into the process of policy and decision making for the protection of our citizens.

The CHAIRMAN. Dr. Mangione, let me stop you at that point. I have read your statement, and it is an excellent statement. Let us get back to this question of who gets access to the data, because I think that is a very serious question. As far as I am concerned, I have already crossed the threshold of saying that it should not be held under the control of DOE, that it should not be rationed according to some preconceived idea of not letting researchers know.

However, I do think it is a very serious question about whether it ought to be released to serious scientists, and your statement gives me great support for my tentative idea, at least, an idea tentatively held by me.

On page 5, you say,

> Scientific credibility and political and social acceptance of conclusions are enhanced by allowing independent scientists to examine data from different perspectives. Grant funds should be made available for competitive proposals. These proposals should be awarded on the basis of ratings given by an independent scientific panel perhaps under the National Institutes of Health or National Academy of Science which is balanced in its representation of various groups and agencies with expertise in epidemiological research. The process must be formalized and widely distributed.

You also speak earlier in your statement about collecting data in a consistent, standardized manner so that information from one individual to the next and facility to the next is of comparable content and quality. Of course, that part of your statement is dealing with the collection of the data, not its dissemination.

I have it stuck in my mind at least tentatively that release of the data should not be controlled on the basis of some predetermined idea about what the best method is but that there ought to be at least some control that the people are responsible, qualified and that they are pursuing some logically consistent scientific method and that the National Academy of Science could be trusted to do that as opposed to just having a pure first amendment question and saying anybody, once you take the names out, can have access to it.

Dr. MANGIONE. Perhaps my comments will be more clear than my writing.

What I was trying to distinguish in that initial paragraph that you quoted is the issue of providing funding——

The CHAIRMAN. Yes, you made that clear.

Dr. MANGIONE [continuing]. As opposed to allowing access to the data on the part of anyone.

The headlines that we see in Denver at least basically are poorly informed statements about the incredible number of cancers that are associated with Rocky Flats. I think good information is good information and from it we do not expect a very smooth road, but the truth will out.

The CHAIRMAN. Do you really think the truth will out?

Dr. MANGIONE. With enough peer review, open forums, comments, yes, I do.

The CHAIRMAN. I want to encourage in every way we can serious scientific inquiry into this information, widespread different methods. My concern is using the data in a nonscientific way. You can use the scientific method in all kind of different innovative ways. It can pass scientific peer review just because it is different, but at least they ought to be responsible and not be the basis of some emotional statement as in the National Enquirer.

Dr. Mangione. My concern, Senator, is that we place ourselves in the situation of knowing better than the person who is applying to get access to the information their qualifications.

I see this as an exception, at least as far as I am familiar with information disseminated by the Centers for Disease Control, a major exception into allowing unbridled access to information.

Having worked at CDC, I have spent a lot of time helping with answering FOIA requests where we simply removed identifiers and made copies of information for all who requested information.

I think that typically we have addressed the issue fairly satisfactorily by giving access to information, and very seldom did anything come from that. Often, people were simply trying to see whether or not they could get access to the information. Really, the issue seemed to stop right there, so that at least in my experience I very seldom have seen the information actually going on to be misused. It was more of a test of the system to see whether or not we were good on our word that we would make information available to anyone with that restriction.

The Chairman. You see no potential for any harm at all?

Dr. Mangione. I think that there is much more harm to be encountered by placing any restrictions on information which has had identifiers removed. I think that after we have answered some requests, there will be much less furor over this issue, where the longer we restrict access to that information on not very defensible grounds—

The Chairman. We are talking about the National Academy of Science, and you give them the charge to make it widely available, test different methods, just be qualified.

Dr. Mangione. That was intended to address specifically the issue of who they would provide funding to. One of the concerns that I have is that many researchers who have familiarity with radiation issues are previously contractors of DOE. We are facing this issue in Colorado right now, trying to find contractors who will help us with our credibility, both the State Health Department and Rocky Flats facility. That is a real problem we keep running up against. Many of the people that we would look at seriously as contractors have been previously funded, taken their paychecks from DOE in fairly direct ways.

My idea there was really one of getting institutions funded through the National Academy of Sciences independently of DOE activities so that they have never or would not be able to claim that their pay actually came from DOE as directly as it appear it does now.

The Chairman. The case you make is a strong one, and I am not in a position really to answer that except my feeling that irresponsible people could make an emotional case which could greatly upset the public, telling everybody they are going to die of cancer next week in Colorado.

Dr. Mangione. But Senator, that happens right now.

The Chairman. It sure does. But they would at least say we have the data and that is what it proves.

Dr. **Mangione**. Then you get into an arena where scientific debate can occur. There are some people, despite the validity of your arguments, who will never believe what you have to say, and I think we have to accept that. We never will be able to convince everyone that in fact the findings are one way or the other. That will simply be a fact of life, I think.

There are some people who with open debate have begun—and we have seen this process in Colorado quite successfully so far—realizing that you are open to discuss these issues, and making available information is a major step forward and decreases to a large extent the suspicion with which at least the State Health Department and DOE as well is viewed.

The **Chairman**. Senator Wirth.

Senator **Wirth**. Thank you very much. I think that is a very good statement, Dr. Mangione. That is just the experience that we have had in Colorado with no data out there, and as a consequence you get a kind of public hysteria which may or may not be valid. I do not know because I do not have the data, and I do not know anybody who does have the data and can look at it and do a careful study about what is going on.

If I worked at Rocky Flats, I would be deeply troubled by all that, and certainly I think it is a lot worse situation than we are in now. The parallel between Big Brother saying what is good for you and what is not good for you to a lot of other things I think is extremely dangerous.

Dr. **Mangione**. I agree.

Senator **Wirth**. I appreciate your remarks on that.

Dr. Geiger, your testimony was just excellent. I think as a result of such good testimony, we are going to reward you with a year's subscription to the National Enquirer. [Laughter.]

Dr. **Geiger**. I was beginning to worry if I had immunity from anything that the National Enquirer wanted to say.

I just wanted to make sure that one thing was clear because Dr. Mangione and I, I think, are really saying the same thing. We are making a distinction between review by NAS or somebody of applications for grant funding, competitive peer reviewed applications for funding. Sure, some qualified scientific review, we both agree.

Applications for access, we both say that is not necessary. I guess I would add the National Enquirer has access now to Medicare tapes, and I suppose they could go get Medicare tapes, because anybody can get them, and publish an article that said "diagnosis-related groups are killing millions of elderly people, it is the latest plot on the part of somebody or other'. That is not going to hurt us in an open society very much.

The dangers on the other side of access being denied to people who might have a real contribution to make and in the consequent of credibility I think are much greater, sir.

Senator **Wirth**. Dr. Mangione, you have responsibility for protecting the health of the citizens of Colorado. That is a fundamental responsibility of you and your department.

Dr. **Mangione**. Yes.

Senator **Wirth**. Now to do so, you need certain resources, and presumably in your monitoring of Rocky Flats the Department of

Energy is to provide you with resources to monitor them; is that correct?

Dr. **Mangione**. That is correct.

Senator **Wirth**. Now what kind of resources do they provide to the Department of Public Health in Colorado; do you know?

Dr. **Mangione**. My understanding is this past year they have provided $1.8 million to the environmental monitoring programs, but there is an additional $700,000 which was awarded as an initial award to the Division of Disease Control and Environmental Epidemiology to begin health related activities.

Senator **Wirth**. The purpose of that $700,000 was to conduct epidemiological health, dose reconstruction, and risk assessment studies; is that right?

Dr. **Mangione**. Yes, that is correct.

Senator **Wirth**. How much would it cost to do the job the way it ought to be done from your perspective? I mean if you were saying we want to do this job professionally and carefully, do you have any sense if $700,000 is adequate for doing that job?

Dr. **Mangione**. No. It is hardly even a beginning to begin to address this issue. We anticipate the expense running around $6 million total.

Senator **Wirth**. So you have about one-tenth of the capability necessary to do the kind of epidemiological studies necessary for you to meet your responsibilities as stewards of the health of the citizens of the State of Colorado?

Dr. **Mangione**. That is correct.

Senator **Wirth**. That is a pretty devastating statement, it seems to me. Is anybody else doing the other work?

Dr. **Mangione**. No, not that I am aware of.

Senator **Wirth**. DOE has said that under the three-party agreement they are going to contract with you to do the job?

Dr. **Mangione**. Yes.

Senator **Wirth**. They have contracted with you but have starved you from the capability to conduct the research necessary to fulfill their agreement; is that correct?

Dr. **Mangione**. Correct.

Senator **Wirth**. Do you have any concerns about the quality of the data that you will get from Rockwell officials on worker health or toxic emissions?

Dr. **Mangione**. Yes, I have a lot of concerns. My primary concern is there simply are not records available to support the kind of information or further steps that we need to take. They simply have not been monitoring station setup or appropriate chemicals tested for.

One of my concerns is that we have been focusing primarily on radioactive materials, but in fact there are many very toxic organic and inorganic chemicals that are typically used at nuclear production facilities which may present every bit as much, if not more, of a problem.

I also have concerns about access to information. We have only begun to ask questions about what will and will not be made available to us in support of our health related activities, and I am very concerned that at some point, information will be withheld from us.

Senator **Wirth**. It does appear to me then that this is but another example of the Department of Energy's lack of commitment to the epidemiological side. If you have these kinds of very significant questions about the adequacy of the data, much less the availability, and even if it was available you say it has not been systematically and carefully collected.

The **Chairman**. May I interrupt? Are you talking about the toxics now or the nuclear material?

Senator **Wirth**. I was asking her about the data related to radioactive and toxic emissions and worker health.

Dr. **Mangione**. I think that we feel that there is probably more accurate and a greater quantity of information concerning radioactive materials.

As far as I am aware, at this point the information on toxic materials, nonradioactive materials, is exceedingly limited.

Senator **Wirth**. What about the information on worker health?

Dr. **Mangione**. We have been somewhat separate from that in that we have been addressing primarily environmental risk to the community surrounding the plant.

One of the points that I would like to emphasize, however, that I tried to make in the testimony is that environmental health studies are very problematic and depend to a very large extent on worker studies. Populations living around plants tend to move. They are very hard to follow. They include a whole spectrum of folks, and it is exceedingly difficult to sort out what their dose or potential dose to potential toxic substance may be.

So to a large extent, we have to rely on worker studies and what we have learned from worker studies to draw conclusions about environmental risks to our citizens.

Senator **Wirth**. We are all considering our responsibility to the people that live around the plant and to the people in the Denver metropolitan area. When the agents move into Rocky Flats, we have a raid, and people are concerned about what the impact has been on them and their children and what might it be. That seems to me to be the broad public confidence problem.

You are saying that it is very difficult to get a measure as to what the impact is on citizens around the plant without having at least good base data related to what is happening to the employees.

Dr. **Mangione**. Exactly.

Senator **Wirth**. We do not have good base data on what has happened to the employees. What we do have is not available to scientific researchers.

Dr. **Mangione**. The availability issue I think we have just really begun to address.

Senator **Wirth**. We were talking about that in the earlier exchange.

So there is no way that we could make the people in the community feel better about Rocky Flats being there or to understand the health impacts without having very clear information on impacts of the workers there. We do not have good information on the workers either because the research has not been done or because what has been done has not been available to reputable groups in the scientific community.

Dr. Mangione. The Department of Energy has published some articles or one article in particular on worker health, but generally that is correct. It has not——

Senator Wirth. Was that article peer reviewed, do you know?

Dr. Mangione. Yes, it was. It was a publication by Wilkinson the American Journal of Epidemiology about 2 years ago.

Senator Wirth. Just as a sidebar, what were the results of that?

Dr. Mangione. There were two, as I recall, results which were statistically significant, which is the way epidemiologist judge whether a result was likely to be meaningful.

One was there appeared to be a statistically significant excess of brain cancers among workers at the plant, and also there appeared during one of the exposure groups to be a statistically significant excess of lymphopoietic cancers. That would be leukemia, for example. The study was based on relatively small numbers, and the primary exposure that was evaluated was that of radioactive materials. They really did not look at exposures to solvents, organics for example.

Senator Wirth. Now let me just draw a parallel. When the problem of various toxic releases in the environment, toxic chemicals, came up, PCB's for example, there was an enormous public outcry when the first EPA studies on PCBs came out. Do you remember that? I think it was about 3 years.

Dr. Mangione. Yes.

Senator Wirth. That was then followed by a whole state of scientific analyses of PCBs. Remember, that was a very hot topic, and the amount of research that went into PCBs and other toxic chemicals in the environment and its impact on individuals increased very sharply.

Dr. Mangione. Yes.

Senator Wirth. Now there is a parallel between that and the research done at Rocky Flats on various brain cancers and lymphomatic cancers?

Dr. Mangione. Lymphopoietic. Leukemias.

Senator Wirth. Okay, of various brain cancers and leukemias.

Was there then a lot of followup from the scientific community saying, well, if we have found statistically significant increases in brain cancers and leukemias in these studies, we then should study it more broadly to find out if in fact in an even broader population the same trends exist?

That would be a logical question to ask, would it not?

Dr. Mangione. Yes. I had some discussions with some Oak Ridge-Associated University representatives where at one point they were talking about doing a more general study of individuals working in a variety of plants, not just at Rocky Flats.

Senator Wirth. This study came out 2 years ago that you are talking about?

Dr. Mangione. Right.

Senator Wirth. Now what has been done in that two-year period of time? Has the Department of Energy, who is responsible for sponsoring research in this area, sponsored broader research to find out if in fact, looking at other plants and looking across a broader population of workers, the same phenomena of brain cancers or leukemias existed?

Dr. **Mangione**. I am not familiar with the details of any study.

Senator **Wirth**. Do you know of any, Dr. Geiger, that have been done?

Dr. **Geiger**. No.

Senator **Wirth**. If you were running a research organization and you had what Dr. Mangione says is a statistically significant result from studies but it was a relatively small population, would the first thing or one of the first things you would do is say, hey, this might be something very significant, we ought to look across plants and across a broader population?

Dr. **Geiger**. The first answer to that is yes, of course.

The next answer is that that is precisely what would be possible if there were wider access to this data.

The third answer is maybe somebody ought to talk to Dr. Wilkinson. My understanding is that he had an enormous struggle to get to publish that paper——

Senator **Wirth**. Oh, really?

Dr. **Geiger**.[continuing]—because the DOE was not that happy with the findings, and that is another consequence of this kind of exclusive internal control of the whole process.

One additional comment, almost all of the studies that have been mentioned are mortality studies. That means, in effect, you are waiting for people to die to find the effect. There are a lot of us who feel that the DOE would have been much more advised to be doing morbidity studies, illness studies which, while posing a variety of other kinds of methodological difficulties, can very often give you earlier clues and earlier answers.

That is just one of a series of problems. I know of 76 published studies by the Department of Energy over all. Not all of them are epidemiologic, and in fact not all of them are published. I should just say listed. That is a very small output for some 30 years or so, and they are not all epidemiologic studies by any means.

I think we should have had and should have in the future a much broader record of productivity.

Senator **Wirth**. This will be my final question.

Is any of this data about which we are talking classified?

Dr. **Geiger**. There may be some questions of classification which would not pose a problem to epidemiologic research of the kind we are talking about that might have to do with the precise job descriptions of people on some production line or another.

I do not need that. One does not need the classified information.

Senator **Wirth**. From your point of view, there might be, as you point out in your testimony, national security reasons for how you design a trigger for a nuclear warhead, but there are no national security reasons that you know of why this data could not be made available?

Dr. **Geiger**. The only national security issue here is to help the workers and the surrounding communities. That is part of the national security of the United States, as far as I am concerned.

Senator **Wirth**. Do you know of any national security reasons why this information could not be made available?

Dr. **Mangione**. No, I do not.

Senator **Wirth**. Mr. Chairman, I really appreciate having this hearing. I think it has been very important in looking at the responsibilities that DOE has had. Clearly, the resources that they have made available to the topic nationally have been inadequate. The testimony we received from the State of Colorado today points out that those resources have been even more inadequate in dealing with the health research problems necessary in Colorado.

It seems to me we have exposed the privacy issue. We have exposed the peer review delinquency of the Department of Energy. We have pointed out that they have almost no capability of dealing with this. I think one Public Health Service doctor manages 45 DOE medical field offices.

Dr. **GEIGER**. One occupational health physician for 45 field offices.

Senator **WIRTH**. For 45 offices, which would be very difficult, it seems to me, to even memorize the list of plants and contractors much less do the job that had to be done.

The list goes on and on: the inability of the Department of Energy to impact public policy, to impact guidelines, to impact procedures admitted by the Department of Energy. It is hard to find any kind of a defense for the job that the Department of Energy has done in maintaining this epidemiological research.

I think we have just a resounding affirmation of the need advocated by many of us for a long time of moving this research out of the Department of Energy and getting it into a responsible health agency where it belongs.

I greatly appreciate both of you being here, and I would commend particularly, Mr. Chairman, Dr. Geiger's excellent testimony. I was going to read excerpts of that, but I will not. I will just commend it. It is a first rate piece of work, and I thank you very much. Thank you both.

The **CHAIRMAN**. Thank you, Senator Wirth.

I do appreciate your testimony. I think you made a very strong case on this data. I came in tentatively feeling that it ought to be released only to qualified, responsible people, but I am tentatively persuaded in your direction. I want to hear from the Department of Energy on that.

I have stated my concern on the irresponsible release of conclusions from that, but I guess, as you say, that goes on anyway.

Let me ask just a couple of followup questions.

First of all, do we know the nature of the Hanford release which you talked about earlier, Dr. Geiger?

Dr. **GEIGER**. I think, as Dr. Hoffman said, it was mostly radioiodine, I-131.

The **CHAIRMAN**. What was the mechanism for that release?

Dr. **GEIGER**. There were a variety of releases totaling 500,000 curies over time. Most of them were emissions into the air, as I understand what has been reported. There was one deliberate 50,000 curie release which was supposed to be a test of the environmental monitoring system. I do not know what other rationale there was. That was an airborne release which was deliberate.

The **CHAIRMAN**. Do we know what killed the sheep?

Dr. **GEIGER**. That was a different question. That was fallout from testing. It really does not involve the nuclear weapons plants production. That happened way back in 1953. I was invoking that as a measure of the problem of an agency having the right to suppress deleterious information.

The **Chairman**. Now did I detect any difference in your testimony? You were talking about this radioactive data being a wealth of information, the best there is, and Dr. Mangione, I believe you were saying that you do not have very good information on the workers at Rocky Flats and elsewhere.

Please explain. Is there any difference in what you were saying?

Dr. **Mangione**. No. My comment really was directed toward the fact that at the state we have no jurisdiction over the worker health, so we are somewhat removed from having access.

The **Chairman**. You do not.

Dr. **Mangione**. I do not.

The **Chairman**. Does DOE have data which will be reliable and good data, do you think?

Dr. **Mangione**. My understanding from testimony given in Chicago at the SPEERA committee by Dr. Goldsmith leads me to believe that, in fact, there are subsets of data or subsets of the total entity of potentially available data which are in quite good shape, as Dr. Geiger said.

Because they were used for specific studies, researchers went in, gathered the information, put it together and computerized it, and it has had all the appropriate data checks, editing checks, that sort of thing. So that information, upon which, for example, the Wilkinson article was published, should be in good shape.

The **Chairman**. So in that sense you think that this data will be a real wealth of information for researchers on—

Dr. **Geiger**. These are the so-called integrated data base files and some so-called data analysis files in addition.

There are always problems with data, and there are always problems with raw data. This is data that has been cleaned up, in effect, and every attempt has been made to get the problems out and do the cross-checking and so on.

Dr. **Mangione**. I think we need to emphasize that that is a subset. My understanding is that in the vast majority of instances, the information has either not been collected or it is, in fact, sitting in some boxes, just copies of paper.

Now that is not all of it. Clearly, there are subset analysis files that are in good enough shape that could be released, as far as I am aware, readily.

We also have the issue of the minimum data set and the fact that generally, information other than what has been put together by specific researchers has no consistency from one individual to the next.

The **Chairman**. Speaking of the DOE data now, you say some of it is in boxes?

Dr. **Mangione**. I think when we are talking about DOE information, we are talking about very mixed situations.

If a researcher has come to DOE in the past and said I want to do a project on XYZ and they work through the process and they are able to get permission to do that, that researcher has created a data base that then is a subfile or what DOE is calling an analysis file. It has been computerized, edited and analyzed. That potentially without identifiers is available right now for release.

My understanding also from Dr. Goldsmith is that, in fact, there are many other records that do not exist in that form. Rather, they are, as you mentioned earlier, in boxes. They have not been collected on the same form from facility to facility, collected regularly over the years, and have not been computerized.

The **Chairman**. That which is in boxes, surely we would have to have some peer review on that, because there would be only one copy of it. You just cannot put all this stuff in the library and let the first person who gets it—

Dr. **Geiger**. And you have to remove the personal identifiers from that material.

It is confusing. There are three levels of material, as I understand it, to which the DOE has referred and which Dr. Mangione is describing. There is this so-called raw data, some of which is in boxes and all kinds of other forms.

The second level is what is called the integrated data base files, which is that material transformed from the raw data, personal identifiers removed, the exposure records all there, and that is available to be put together with mortality data that comes from the Social Security Office, for example, for researchers and for morbidity studies, illness studies. If somebody wanted——

The **Chairman**. Is that what is on the floppy disk?

Dr. **Geiger**. That is on disk or tape, and that, DOE has testified in the Three Mile Island suit, is available now on various figures between 250,000 and 300,000 workers.

Then sometimes drawn from raw data, sometimes from those integrated data base files, there are these data analysis files or subsets that particular researchers have done for a particular project.

The bottom line from the point of view of getting going with wide access to investigators looking at this data and testing hypotheses is that it seems very clear from the DOE's own testimony that within a few weeks data with personal identifier removed in usable form on something like 300,000 workers over a substantial number of years would be available. We do not have to wait for the seeder process to be finished over a six-year period to begin on that much of the data. One could start really almost immediately, and it does not cost very much to duplicate that.

Now, as Dr. Mangione says, that is partial data, it is not the whole set, and there is a lot more that can be done and needs to be done, but it is a beginning.

The **Chairman**. We will ask DOE about that. To be fair to DOE, Admiral Watkins is reviewing this. He does not defend the past practice, and he is reviewing it with a view to a responsible way to release it. So we will see what he has to say.

Thank you very much, Dr. Geiger and Dr. Mangione. You have been very helpful.

[Whereupon, at 3:52 p.m., the hearing was adjourned.]

APPENDIX

RESPONSES TO ADDITIONAL QUESTIONS

ANSWERS TO POST-HEARING QUESTIONS
RELATING TO THE
OCTOBER 5, 1989, HEARING
BEFORE THE
COMMITTEE ON ENERGY AND NATURAL RESOURCES
U.S. SENATE
WITNESS: ADMIRAL JAMES D. WATKINS, U.S. NAVY (Retired)
SECRETARY OF ENERGY

QUESTIONS FROM SENATOR JOHNSTON

Environmental Compliance

Question 1: Senator Glenn's Bill, S. 1304, contains a provision requiring the Department to enter into compliance agreements with state governments and EPA for facilities that are not in compliance with environmental laws. It does not, however, contain any remedy for failure to reach a compliance agreement among the parties. What possible remedies are available for failure to conclude negotiation of a compliance agreement?

Answer: A good remedy is for the EPA Administrator to establish a mechanism to resolve differences subject to the President's direction. This mechanism would provide for a full airing of views by all parties and a single person (the EPA Administrator) to direct the process. In addition, a federal facility is subject to applicable statutory remedies governing noncompliance. If no agreement is executed and noncompliance continues, DOE would be subject to whatever enforcement action is authorized by the statute in question.

QUESTIONS FROM SENATOR JOHNSTON

Environmental Compliance

Question 2: The contractor would not be included as a party to a compliance agreement under the Glenn Bill. The same was true of the recent agreement worked out by DOE, EPA, and the State of Colorado for Rocky Flats. As I understand it, this was a bone of contention for Rockwell. Wouldn't there be significant advantages to including the operating contractor as a party to a compliance agreement? What would the disadvantages be?

Answer: The Department is ultimately responsible for the operation of its facilities. No contractor can establish Departmental policy or commit the Department to the expenditure of public funds. The Department has the responsibility to communicate the conditions of any Federal facility agreement to the contractor to ensure that the provisions and schedules contained in the agreement can be met. Making the contractor a party to the agreement might provide the contractor with a greater sense of participation and possibly greater control over its potential liability; at the same time, however, contractor corporate interests could complicate the negotiation of an agreement.

QUESTIONS FROM SENATOR JOHNSTON

Environmental Compliance

Question 3: How do we develop incentives to encourage all parties -- the Department, the EPA, the state, and the operating contractor -- to sit down and work out a plan that will lead to environmental compliance without disrupting the vital national security mission of these facilities?

Answer: There are sufficient incentives for the Department and its operating contractors to reach agreement with its regulators to bring all facilities into compliance with environmental requirements as quickly as possible. My policy is compliance with all environmental requirements; production and environmental protection are not mutually exclusive goals. In accordance with my ten-point initiative, the criteria for awarding contractor fees are being modified to reflect an appropriate balance between production goals and environment, safety, and health issues with an increased emphasis on the latter. My ten-point initiative served as the basis for the comprehensive agreement in principle between DOE and the State of Colorado to provide funding to the State for onsite monitoring. DOE has begun negotiations on similar agreements with other States which host our many facilities, as well as many other negotiations to enter into agreements for specific compliance activities.

Answer 3
(continued): Bear in mind as well that DOE could seek a Presidential exemption to compliance with State environmental laws if I determine that national security is being threatened. The knowledge that this can be done should serve to moderate unreasonable State requirements.

QUESTIONS FROM SENATOR JOHNSTON

Compliance and DOJ

Question 4: I'd like to explore the incentives for a contractor and DOE employees to disclose violations and engage in operations that are necessary but that may result in violations of environmental laws at DOE facilities. [An example may be storage of mixed radioactive and toxic waste at one of the sites in violation of EPA rules against such storage.]

On September 14, 1989, Richard B. Stewart, Assistant Attorney General for Land and Natural Resources, wrote to you and EPA Administrator Reilly about the exercise of prosecutorial discretion in the matter of Rockwell International Corporation and Rocky Flats. In this letter Stewart says that --

> "Prompt, good faith efforts by Rockwell and DOE to disclose environmental violations and reach environmental compliance agreements with the State of Colorado and the United States Environmental Protection Agency would be a significant factor in any decision whether to prosecute Rockwell, its employees, and DOE employees with respect to future violations of environmental laws that occur by reason of continued operation of the plant."

Once a compliance agreement is reached, Justice's "general practice would be not to prosecute DOE employees or Rockwell or its employees for conduct undertaken in accord with and authorized by such agreements."

However, in closing the letter, Stewart says that general practice--

> "would not preclude prosecution of crimes such as false statements, perjury or obstruction of justice committed during [the period of an agreement]. It would also not preclude the use of any evidence, whether conduct or otherwise, obtained as a result of operations during this period in prosecutions of such crimes."

Evidently, this letter did not reassure Rockwell sufficiently to keep them on as a contractor at Rocky Flats.

-- What assurances do you believe a contractor should have --
(a) while a compliance agreement is being negotiated?
(b) during the operation of the agreement?

-- Do these assurances need to be statutory? Is the language of the Justice letter helpful in this regard?

Answer: Assistant Attorney General Stewart's September 14, 1989 letter was a welcome and useful clarification of the Department of Justice's views on the use of prosecutorial

Answer 4 (continued):

discretion. The letter states that good faith efforts by DOE and its contractors to disclose environmental violations and to negotiate agreements for their resolution will be a significant factor in any decision to prosecute DOE contractors, or employees of either DOE or its contractors, for violations resulting from continued facility operations. It is my understanding that Assistant Attorney General Stewart's letter provided the broadest assurance in this regard that the Department of Justice can provide under current law.

The purpose of such assurances is twofold: 1) to encourage an atmosphere at DOE facilities where focus on environmental concerns or problems becomes routine, rather than a side thought or something workers or managers feel they need to hide -- we want our DOE staff to report their own and the contractors' mistakes, and 2) to provide a structured, formal process for actually cleaning up 30 years of waste buildup and environmental contamination. Formal recognition of compliance agreements as the method for cleanup and proper operation of DOE facilities will bring actual progress to these sites.

DOE believes that it also would be helpful to have additional assurances provided in statute, such as the assurance that civil, criminal, or administrative enforcement action will not be brought for noncompliance with environmenal laws pending the completion of the negotiation of a compliance agreement. A

Answer 4 (continued):

provision like this would encourage persons at DOE facilities to identify the problems at their facilities so that the problems could be included in a compliance agreement and corrected. Other similar provisions also would be useful so that people who in good faith have identified environmental violations, entered into compliance agreements, and are fulfilling their obligations under those agreements should not live in fear of criminal prosecution for ongoing incidents of noncompliance with environmental laws and regulations.

QUESTIONS FROM SENATOR JOHNSTON

Competition in Cleanup Contracting

Question 5: **There is some question whether the existing DOE contractor management structure can or will accommodate cleanup objectives both in terms of cost effectiveness and the public interest. For example,**

-- Is a competitive process required to assure cost effectiveness and public confidence in the cleanup process?

Answer: We do not believe that the competitive process is necessary, in every case, to assure the cost effectiveness and the restoration of public confidence in the cleanup of the various DOE facilities. Each site must be reviewed in its own context. Accordingly, if based upon our thorough analysis, we conclude that the management and operating (M&O) contractor is the best resource to undertake the cleanup activities, we will utilize that contractor. On the other hand, if we believe that an independent contractor is necessary to effect the cleanup, we will take that course. Competition is but one of the many considerations that we will analyze in resolving DOE's environmental problems.

Answer 5
(continued): Most of our M&O contractors may be the only firms qualified to perform cleanup activities at their sites. It is the M&O contractor that has intimate knowledge of the facility and the extent and nature of the contamination. While it may be desirable to have contractors other than the M&O contractor perform some cleanup activities, our need to act quickly and decisively within current budget and schedule constraints may require the use of the existing M&O contractor. Of course, it is incumbent upon DOE to ensure that policies, procedures, controls, and oversight are established and maintained to accomplish these actions.

QUESTIONS FROM SENATOR JOHNSTON

Competition in Cleanup Contracting

Question 6: In view of the liabilities inherent in the conflict between your responsibilities, EPA's regulations, and the interests of the states, how can you be confident that we don't wind up with only a very few large management and operations (M&O) contractors who can stand the risk?

Answer: First, I believe that any conflicts, whether perceived or actual, between DOE, other Federal agencies having responsibilities relating to DOE's mission, and the States can and will be resolved if the parties commit to a course of mutual cooperation and shared responsibility and accountability. I have stated in previous testimony that the objectives of adequate production of defense materials and a safe, clean environment are compatible and achievable goals. The initiatives we have already placed into effect in the Department's contractor management system, other initiatives which will be implemented as problem areas are identified, and the implementation of my ten-point plan will establish for the Department a clear and well-defined course of action. Similarly, our efforts with the EPA, the Occupational Safety and Health Administration, and others will result in a

Answer 6
(continued): clear Federal strategy for maintaining adequate defense production capabilities and environmentally safe operations. A consistent Federal approach will create a stable environment that will foster interest in the operation of DOE's facilities. I believe that the private sector understands the national significance of DOE's defense production capabilities, and will respond to our initiative to increase contractor responsibility and accountability through a balanced policy regarding indemnification of contractors for certain nuclear related risks. This will only occur, however, when the private sector fully understands the missions they are being asked to perform and the risks associated with operating the production facility. While we must demand increased accountability and responsibility from our contractors in all areas relating to the M&O mission, a sense of reasonableness on the part of the Government must permeate our actions if we are to make the significant improvements we see for the future.

QUESTIONS FROM SENATOR JOHNSTON

Competition in Cleanup Contracting

Question 7: One can imagine a situation in which you have a large existing M&O contractor and only a very few potential competitors, so that the distinction between competition and dividing up the work becomes pretty small. Does this concern you?

Answer: At this time we have developed preliminary data which leads us to believe that there are sufficient numbers of contractors throughout the United States who have the capability and willingness to compete for cleanup activities at DOE sites. Thus, we believe that we can get competition. We will, however, closely monitor these cleanup activities to ensure that they are accomplished correctly, on schedule, and in a cost effective manner.

QUESTIONS FROM SENATOR JOHNSTON

Competition in Cleanup Contracting

Question 8: On the other hand, an existing M&O contractor perhaps has a big advantage in bidding for a cleanup contract because of onsite infrastructure and familiarity with the site. Yet this is the very contractor who participated to some extent in the creation of the problems to be cleaned up. Is this a cause of concern to you?

Answer: Yes, but only to a limited degree. Environmental cleanup activities are an important, time-consuming, potentially hazardous, and expensive undertaking. The firms selected by the Department to perform such activities must first be able to do the job right the first time. We cannot afford less than excellence in contractor performance. In certain situations, the M&O contractor may, in fact, have the technical background, experience, and specialized capabilities to perform the cleanup efforts effectively. If the existing M&O contractor is the best firm available to perform the activities and the cost to the Government is determined by DOE to be reasonable, then I have no objection to the use of the incumbent M&O contractor to perform the cleanup activities. The objective is to operate the facility in an environmentally sound

Answer 8
(continued): and safe manner. If use of the existing M&O contractor is the best way to accomplish that objective, then that firm should be tasked to do so.

QUESTIONS FROM SENATOR JOHNSTON

Competition in Cleanup Contracting

Question 9: To what extent are cleanup activities at specific federal facilities currently being funded as part of existing M&O contracts and to what extent are these activities being bid and awarded to other contractors?

Question 10: Would you provide for the record a list of cleanup contracts showing at least contractor, site, purposes, and amount. Specify which contracts were let competitively as new activities separate from the M&O contracts and which contracts do not provide for participation by the M&O contractor either as the prime contractor or in joint venture arrangement.

Answer: A listing of active contracts for environmental restoration activities, including studies, performed by DOE contractors is attached hereto.

U.S. DEPARTMENT OF ENERGY - ACTIVE CONTRACTS FOR ENVIRONMENTAL RESTORATION ACTIVITIES

CONTRACTOR NAME	PURPOSE OF CONTRACT	DOLLAR VALUE	TYPE OF AWARD	COMPETITION
DOE SITE: NEVADA TEST SITE				
REECo, Inc.	Disposal of contaminated barrels; stained soil sites; atmospheric event sites.	$ 813,000	M&O prime contract	N/A
DOE SITE: SANDIA NATIONAL LABORATORY				
Ecology & Environment, Inc.	Site characterization of 90 hazardous waste dumps	$ 876,000	M&O subcontract	Competitive
ENSECO	Sample analyses	$ 135,000	M&O subcontract	Competitive
University of CA.- Los Alamos Nat'l. Lab.	Laboratory Services on water samples	$ 5,000	Integrated Contractor Order	N/A
Rinchem Co., Inc.	Manage Sandia's hazardous waste management facility	$ 4,032,479	M&O subcontract	Competitive
IT Corp.	Hazardous waste disposal	$ 490,000	M&O subcontract	Competitive
CDM Federal Programs Corp.	Environmental protection programs support	$ 600,000	M&O subcontract	Competitive
Brown and Caldwell	Site cleanup	$ 350,000	M&O subcontract	Competitive
DOE SITE: SANDIA NATIONAL LABORATORY, LIVERMORE				
Los Alamos National Laboratory	Environmental Restoration support - site assessments and RDDT&E	$ 50,000 (FY 90)	Integrated Contractor Order	N/A
Roy F. Weston, Inc.	Site assessments	$ 450,000	M&O subcontract	Sole source
Argonne National Laboratory	RDDT&E of biotechnology at the Fuel Oil Spill	$ 15,000	Integrated Contractor Order	N/A

Idaho National Engineering Laboratory	RDDT&E of biotechnology at the Fuel Oil Spill	$ 12,000	Integrated Contractor Order	N/A
DOE SITE: MOUND FACILITY				
EG&G Mound Applied Technologies	Decontamination and Decommission of surplus plutonium facilities and contaminated soil area	$152,041,000	M&O prime contract	N/A
DOE SITE: PINELLAS PLANT				
CH2M Hill	4.5 acre groundwater cleanup	$ 67,856	M&O subcontract	Sole source
CH2M Hill	Feasibility study - hazardous waste site	$ 142,913	M&O subcontract	Competitive
DOE SITE: LOS ALAMOS NATIONAL LABORATORY				
Pan Am World Services	Remediation/decontamination and decommissioning services	$ 414,000	M&O subcontract	Competitive
IT Corporation	Environmental assessments	$ 200,000 (FY 89)	M&O subcontract	Sole source
Merrick & Dames and Moore	Assessment activities - mixed waste disposal activities	$ 100,000 (FY 89)	M&O subcontract	Competitive
DOE SITE: ROCKY FLATS				
Rockwell International Corp.	Remediation of contaminated soils and ground water, RCRA 3004(U), CERCLA/SARA, and RCRA closures	$ 65,500,000 (FY 90)	M&O prime contract	N/A

DOE SITE: KANSAS CITY PLANT

Hastings Construction Co.	Remove underground storage tank, replace with above ground tank	$ 2,061,220	M&O subcontract	Competitive
Heritage Environmental	Install contaminated ground water collection system	$ 794,975	M&O subcontract	Competitive
George Shaw Co.	Remove plating building foundation	$ 270,000	M&O subcontract	Competitive
Anthony Mechanical	Install conveyance system for TCE contaminated ground water	$ 401,258	M&O subcontract	Competitive
UNC Geotech	Ground water sampling and analysis	$ 700,000	M&O subcontract	Competitive
Oak Ridge National Lab.	RCRA facility investigations; corrective measures studies and implementation plans	$ 500,000	Integrated Contractor Order	N/A

DOE SITE: WELDON SPRINGS, MO

MK Ferguson Co.	Decontamination/decommissioning and remediation of quarry, raffinate pits site, plant, and vicinity properties	$211,596,500	DOE prime contract	Competitive

DOE SITE: VARIOUS, FUSRAP

Bechtel National, Inc.	Remedial actions, engineering evaluations, containerize and transport waste, FUSRAP site determinations	$148,518,005	DOE prime contract	Competitive

DOE SITE: OAK RIDGE Y-12 PLANT

CMC Construction	Engineer cap to cover former settling basin for hazardous waste	$ 652,686	M&O subcontract	Competitive

B&D Equipment	Engineer cap to cover hazardous landfill and oil retention ponds, excavation of contaminated soil	$ 1,736,722	M&O subcontract	Competitive
Roehl Construction	Engineer cap for settling basin containing mercury and low level contaminated sediments	$ 320,578	M&O subcontract	Competitive
Camp, Dresser, and McKee, Inc.	Area source pollution assessment of East Fork Poplar Creek	$ 1,758,562	M&O subcontract	Competitive

DOE SITE: OAK RIDGE NATIONAL LABORATORY

Highland Drilling & Exploration Co., Inc.	Removal of underground storage tanks	$ 31,450	M&O subcontract	Competitive
Avisco, Inc.	Tumulus II, SWSA 6	$ 208,500	M&O subcontract	Competitive
Bechtel National, Inc.	Remedial investigation and feasibility study	$ 12,000,000	M&O subcontract	Competitive
Martin Marietta Energy Systems, Inc.	Site investigations and environmental restoration at ORNL, Y-12, and OR Gaseous Diffusion Plant	$ 75,000,000 (FY 90)	M&O prime contract	N/A

DOE SITE: PADUCAH GASEOUS DIFFUSION PLANT

Presley, Inc.	High assay decontamination and cleaning	$ 839,000	M&O subcontract	Competitive
Martin Marietta Energy Systems, Inc.	Site investigations and environmental restoration at Paducah and Portsmouth Gaseous Diffusion Plants	$ 10,000,000 (FY 90)	M&O prime contract	N/A
CDM Federal Programs Corp.	Remedial investigation of several drainage ditches	$ 506,774	M&O subcontract	Competitive

CH2M Hill, Inc.	Site investigations for surface and ground water contamination	$ 1,600,000	M&O subcontract	Competitive

DOE SITE: PORTSMOUTH, OH

John James Estes and Associates, Inc.	X-616 closure and X-735 Monocells	$ 1,805,038	DOE prime contract	8(a) award
Waste Abatement Technology	X-701B sludge removal	$ 1,223,800	DOE prime contract	Competitive
Contractors Four, Inc.	X-750 Gasoline systems rehab.	$ 300,000	DOE prime contract	8(a) award
Contractors Four, Inc.	PCB Troughing	$ 300,000	DOE prime contract	8(a) award
Geraghty & Miller, Inc.	Groundwater consulting services	$ 4,000,000	M&O subcontract	Competitive
MK-Environmental Services	Remedial action services	$ 4,000,000	M&O subcontract	Competitive

DOE SITE: FEED MATERIALS PRODUCTION CENTER, FERNALD, OH

Advanced Sciences, Inc.	Remedial Investigation/ Feasibility Study	$ 32,800,000	DOE prime contract	8(a) award
RMI Company	Restoration and remediation of of Ashtabula facility	$ 5,000,000	M&O subcontract	Competitive
Ralph M. Parson	Water pollution control	$ 1,586,801	M&O subcontract	Competitive
Roy F. Weston	Waste storage area remediation	$ 3,965,253	M&O subcontract	Competitive
Durater Corp.	Demonstration of ion exchange and reverse osmosis on wastewater	$ 203,775	M&O subcontract	Competitive
Rust Engineering, Inc.	Construction activities in support of the environmental cleanup	$ 32,920,941	M&O subcontract	Competitive

DOE SITE: IDAHO NATIONAL ENGINEERING LABORATORY, IDAHO FALLS, ID

Ecology and Environment, Inc.	Technical support for INEL nuclear programs	$	876,057	DOE prime contract	Competitive
Fenix and Scisson	Seal Idaho Chemical Processing Plant injection well	$	348,447	M&O subcontract	Competitive
IT Corporation	Development of risk assessment methodology for site characterization and remediation	$	95,469	M&O subcontract	Competitive
EBASCO Services, Inc.	Review of contractor plans for environmental restoration	$	91,546	M&O subcontract	Competitive
PEI Associates, Inc.	Sample & analysis for WERF Incinerator for RCRA trial burn	$	5,600	M&O subcontract	Competitive
EBASCO Services, Inc.	Technical assistance to prepare RI/FS work plan for TRA warm waste pond	$	24,421	M&O subcontract	Competitive
SAIC	Technical support for review of RI/FS to identify remedial actions	$	157,193	M&O subcontract	Competitive
Alpine Technical Service	System to remove Cesium from ground water	$	15,495	M&O subcontract	Competitive
ICF Technology	Innovative monitoring technology demonstration	$	210,610	M&O subcontract	Competitive
Denning Well Drilling	Drill monitoring wells	$	104,105	M&O subcontract	Competitive
Denning Well Drilling	Install well monitoring equipment	$	30,000	M&O subcontract	Competitive
Golder Associates	Soil sample contamination	$	700,000	M&O subcontract	Competitive

DOE SITE: GRAND JUNCTION PROJECT OFFICE				
M.A. Concrete	Site hazard elimination/ CERCLA cleanup	$ 357,223	M&O subcontract	Competitive
Bayless & Bayless	Site hazard elimination/ CERCLA cleanup	$ 218,059	M&O subcontract	Competitive
DOE SITE: MONTICELLO, UT				
Sonderegger	CERCLA cleanup - uranium mill tailings	$ 67,947	M&O subcontract	Competitive
Crowley	CERCLA cleanup - uranium mill tailings	$ 4,400	M&O subcontract	Competitive
DOE SITE: WEST VALLEY NUCLEAR, WEST VALLEY NY				
CECOS International, Inc.	Collect, package, transport, and dispose of hazardous waste materials	$ 73,513	M&O subcontract	Competitive
Westinghouse Nuclear	Management services to coordinate hazardous waste concerns	$ 11,904	M&O subcontract	Sole source
O'Brien & Gore Engineers	Environmental engineering services	$ 98,037	M&O subcontract	Competitive
Dames & Moore	Safety & environmental assessment, meteorological services, vitrification facility design, management of radiological engineers, seismo-structural engineering and analytical services	$ 4,000,000	M&O subcontract	Sole source
DOE SITE: HANFORD SITE, RICHLAND, WA				
Westinghouse Hanford Co.	Management of Hanford Environmental Restoration Program	$ 70,000,000 (FY 90)	M&O prime contract	N/A

Golder Associates	Remedial investigations/feasibility studies	$ 4,048,000	M&O subcontract	Competitive
SAIC	Facility environmental assessments	$ 1,500,000	M&O subcontract	Competitive
ICF Technology Inc.	Facility environmental assessments	$ 1,200,000	M&O subcontract	Competitive
Kaiser Engineers Hanford	RCRA & CERCLA well drilling activities	$ 532,000	M&O prime contract	N/A
Basin & Range Drilling Co.	Drill 10 ground water monitoring wells	$ 248,657	M&O subcontract	Competitive
Onwego Drilling Inc.	Drill CERCLA wells	$ 150,949	M&O subcontract	Competitive
David A. Mowat Co.	Grout waste disposal vaults	$ 13,917,133	M&O subcontract	Competitive
Advance Science, Inc.	Remedial investigation/ feasibility studies	$ 5,000,000	DOE prime contract	8(a) award
DOE SITE: BROOKHAVEN NATIONAL LABORATORY				
Banker Construction	reconnection of 14 facilities to Sanitary Sewage System; cesspool content analysis/removal	$ 506,000	M&O subcontract	Competitive
IT Corporation	Removal and/or replacement of underground storage tanks; replace and upgrade gasoline tanks	$ 800,000	M&O subcontract	Competitive
KemRon	Soil sampling and analysis	$ 240,000	M&O subcontract	Competitive
Chemical Waste Management	Hazardous waste hauling	$ 250,000	M&O subcontract	Competitive
Rollins Corporation	Hazardous waste hauling	$ 650,000	M&O subcontract	Competitive
DOE SITE: SAVANNAH RIVER, AIKEN, SC				
Westinghouse Savannah River Company	Management of Savannah River environmental restoration	$ 3,000,000	M&O prime contract	N/A

O.I. Materials Corp.	Lagoon basin closure	$ 2,652,786	M&O subcontract	Competitive
Graves Well Drilling	Drill monitoring wells	$ 5,019,502	M&O subcontract	Competitive
Environmental Monitor Testing Co.	Drill monitoring wells	$ 3,220,210	M&O subcontract	Competitive
Safety Kleen Industrial Solvents	Reclamation & disposal of hazardous waste	$ 200,000	M&O subcontract	Competitive
Chemical Waste Management	Reclamation & disposal of hazardous waste	$ 200,000	M&O subcontract	Competitive
Rollins Environmental Services	Transportation & incineration of hazardous waste	$ 300,000	M&O subcontract	Competitive
Chen Nuclear Systems Inc.	Decontaminate retention basin in H area	$ 456,000	M&O subcontract	Sole source
Chen Nuclear Systems Inc.	Closure of 22 underground storage tanks, SRS Burial Ground	$ 365,500	M&O subcontract	Sole source
Enwright Environmental Consulting Labs	Chemical characterization of waste samples	$ 35,000	M&O subcontract	Competitive
The Marley Cooling Tower Company	Construct natural draft cooling tower for hot water discharge	$ 16,860,000	M&O subcontract	Competitive
GKN Hayward Baker	Stabilize foundation for construction of cooling tower	$ 288,815	M&O subcontract	Competitive
Nello-Teer	Mixed waste management facility (Area G) closure - install cap	$ 18,627,093	M&O subcontract	Competitive
Camp-Dresser-McKee	Remediation/feasibility investigations	$ 527,901*	M&O subcontract	Competitive

CH2M Hill	**Remediation/feasibility investigations, assessments, studies.**	$ 1,167,459*	**M&O subcontract**	**Competitive**
Dames & Moore	Environmental assessments and studies	$ 302,214*	M&O subcontract	Competitive
SAIC	Environmental implementation plans and studies	$ 255,904*	M&O subcontract	Competitive
metaTrace	Soils analyses	$ 313,084*	M&O subcontract	Competitive
Sirrine	Studies, remediation/feasibility investigations	$ 760,332*	M&O subcontract	Competitive
Sirrine	Geologic oversight	$ 794,360*	M&O subcontract	Competitive
Weston Analytics	Soils analyses	$ 305,000*	M&O subcontract	Competitive
WES	Groundwater studies, geologic oversight, remediation/feasibility investigations	$ 790,527	M&O subcontract	Competitive

* these contracts are task assignment contracts for environmental services. The dollar amounts shown are the value of active task assignments.

QUESTIONS FROM SENATOR JOHNSTON

Sovereign Immunity

Question 11: **Various groups have proposed so-called "solutions" to the problem of environmental compliance at the Department's facilities. One of these "solutions" is that the federal government be required to waive sovereign immunity to allow states to impose unilaterally civil penalties for noncompliance. The theory behind this "solution" is that it will provide states the hammer necessary to enforce compliance. I do not agree that this waiver of sovereign immunity would provide a "solution." This "solution" would result not in setting priorities to clean up the most contaminated sites first, but in allowing priorities to be set by the Governors and Attorneys General who are the most persistent and tenacious. In my opinion, this will certainly not help us in bringing about a consistent, effective policy for achieving and enforcing compliance with the environmental laws.**

-- What is the Administration's position on these legislative proposals?

Answer: I wholeheartedly agree with you, Mr. Chairman, that waiver of sovereign immunity would not provide a solution. Earlier this year this Department, on behalf of the Administration, testified to that effect at hearings on those proposals. I believe these proposals, which focus on legal sanctions, focus on the wrong aspect of the problem. Unlike private companies, Federal facilities aren't in business to make a profit, so the performance incentives differ. In DOE's case, our defense facilities are there to perform a vital service--to produce the weapons that our

Answer 11 (continued): highest civilian leaders have determined are needed to preserve our society and way of life.

I understand the frustration of the States in dealing with what they perceive as DOE intransigence over the years and why they want firmer authority. I've tried to work with the States to ensure real oversight and environmental authority for DOE facilities, as well as the opportunity to renegotiate compliance agreements. These new agreements provide a possible compromise on this issue -- fining authority would be given the States after the compliance agreement was completed and based on the conditions of the agreement.

While there are many facets to the solution of environmental compliance problems at our facilities, none is more important than changing the culture which for so long emphasized production at the expense of everything else, including environmental concerns. I have begun that process and am determined to succeed.

Changes in the law which provide incentives toward environmental compliance, such as those indicated

Answer 11 (continued): in response to #4, would be helpful. To the extent that current law precludes prioritization of corrective action, for example, changes in law would be desirable. Clearly, many things can and are being done administratively:

-- identifying compliance problems through the use of "tiger teams"

-- reviewing and changing our management and operating contracts to reward good environmental performance and penalize poor performance

-- carrying out my 10-point initiative

-- implementing the five-year cleanup plan as funds are appropriated

Similarly, our employees and contractors need assurance that, when they identify environmental problems and initiate action to correct them, they won't be fined or thrown in jail because the problem hasn't been fixed yet. The Department of Justice letter in that regard is very helpful.

In short, the solution will require the dedicated efforts of many people at the Federal, State, and

Answer 11
(continued)

local levels working cooperatively, rather than confrontationally. Much time and many dollars will be needed. The change in culture will not be completed overnight.

QUESTIONS FROM SENATOR JOHNSTON

Sovereign Immunity

Question 12:	Do you believe that allowing states to impose civil penalties on federal agencies violating environmental laws would cause the agencies to comply?
Answer:	No, for the reasons stated in the answer to question 11. Like you, I fear that this approach would result in priorities being set by those who scream the loudest and longest, rather than on the basis of fixing the most serious problems first. However, the compromise you proposed in your legislation would be acceptable.

QUESTIONS FROM SENATOR JOHNSTON

Sovereign Immunity

Question 13: If such civil penalties were imposed, would they be paid for in the Department's program operating budget, or paid for from the Judgment Fund?

Answer: I am advised that under current law, the judgment fund would be tapped for civil penalties that result from judicial action, but that administratively imposed penalties would have to be paid from DOE's funds to the extent that they are not a contractor's sole responsibility.

QUESTIONS FROM SENATOR JOHNSTON

Blue Ribbon Task Group

Question 14: **The DOD Authorization bill passed by the Senate in July included a provision setting up a Blue Ribbon Task Group to look at, among other things, the issue of environmental compliance and enforcement of compliance. The question put to the Blue Ribbon group would be how to achieve, maintain, and enforce compliance with environmental laws while minimizing interference with the national security mission of these facilities. The idea was to look at this issue from a national, big-picture perspective and to develop an orderly process for bringing about environmental compliance. I supported this concept wholeheartedly. What is your view of the Blue Ribbon Task Group?**

Answer: I consider the Blue Ribbon Task Group to be unnecessary and am pleased that the provision was not part of the DoD authorization bill that was enacted. As I promised, the Department has moved out quickly to develop an action plan for environmental cleanup of its inactive waste sites and to achieve compliance with environmental requirements. My Environmental Restoration and Waste Management Five-Year Plan was released on schedule. Site-specific implementation plans will be developed before the end of the year by each major field office. A forward-looking applied research, development, demonstration, testing, and evaluation plan has just been completed and will be integrated in the overall Five-Year Plan as it is updated next year. This latter process has

Answer 14 (continued): been carefully developed to accelerate the assessment of, and solution to, the environmental problems at DOE defense facilities, as well as to bring new and innovative technology into play to reduce the eventual cost of restoration and waste management. A national priority system is being developed and a new Headquarters organization responsible for implementing the Five-Year Plan has been put in place.

I believe that we are making great strides toward rebuilding public confidence in our ability to operate these facilities safely, and are already beyond what this provision, now deleted, would do for us. I am pleased that the conferees struck this provision from the bill. I have asked Congress to limit the imposition of additional oversight or advisory bodies while I continue to guide, redirect, and enhance the Department's environmental protection activities. If, after a reasonable period of time, Congress determines that additional oversight of DOE operations is needed, I will work with you to develop and implement such additional measures.

QUESTIONS FROM SENATOR JOHNSTON

Blue Ribbon Task Group

Question 15: Do you agree with the need to develop an orderly process to bring about environmental compliance and to maintain compliance over the long-term?

Answer: Yes. There is such a process currently in place. The process includes identifying violations, notifying the regulators, negotiating compliance agreements, and then implementing the agreements until compliance is attained. This is the process currently followed by DOE and it is consistent with EPA's *Federal Facility Compliance Strategy*. DOE currently has 47 compliance agreements in place and negotiations are ongoing for an additional 22 agreements.

QUESTIONS FROM SENATOR JOHNSTON

Blue Ribbon Task Group

Question 16: Do you believe that the Blue Ribbon Task Group is an appropriate body to deal with the long-term solutions for this problem?

Answer: As stated in my response to Question 14, I am convinced that the Blue Ribbon Task Group is unnecessary at this time. I am pleased that the conferees struck this provision from the DoD authorization bill.

QUESTIONS FROM CHAIRMAN JOHNSTON

Office of Environment, Safety, and Health

Question 17: Senator Glenn's bill contains a title establishing an Assistant Secretary for Environment, Safety, and Health and establishing a list of responsibilities of that office. You have indicated your own plans for reorganization of that office and realignment of responsibilities within the Department. What is your opinion of this title of the Glenn bill?

Answer: I have several concerns with that title (V) of Senator Glenn's bill, S.1304. First, I believe it does not focus on the Department's real need. The Department has already established an Assistant Secretary for Environment, Safety and Health. What we need now is to establish a new Assistant Secretary for Environmental Restoration and Waste Management to effectively and efficiently manage the Department's activities and responsibilities in those two critical areas.

Second, by establishing specific statutory responsibilities and authorities for the Office of Environment, Safety and Health, the bill would restrict my authority, or the authority of a future Secretary of Energy, to organize the Department and assign duties among my staff in the manner I consider most appropriate.

Third, once an Assistant Secretary is provided

Answer 17 (continued): specific authorities by statute, further legislation would be required to reassign portions of that position's statutory authorities to another Assistant Secretary. As a result realignment of authorities could become a very difficult and time-consuming process, thereby reducing my ability to deal with changing situations and needs.

QUESTIONS FROM CHAIRMAN JOHNSTON

Office of Environment, Safety, and Health

QUESTION 18: In your opinion, are there additional responsibilities that should be given to the Assistant Secretary for Environment, Safety, and Health? Or should certain responsibilities be placed elsewhere within the Department?

Answer: I do not believe that specific additional authorities and responsibilities should be statutorily assigned to the Office of Environment, Safety, and Health for the reasons that I have expressed in the preceding answer.

QUESTIONS FROM CHAIRMAN JOHNSTON

Office of Environment, Safety, and Health

QUESTION 19: **Based upon your experience to date and your own evaluation of the alignment of responsibilities within the Department, how would you propose that the Department be reorganized? Would you advocate establishing these new responsibilities by statute?**

Answer: At my direction the Deputy Secretary and the Under Secretary are continuing their review of the organizational structures and management practices throughout the Department in order to improve how the Department does its job. The review will result in a number of significant changes, the implementation of which will extend over a number of months. This review is not yet complete. Although I have taken some interim actions to modify Departmental organization and management arrangements to address high priority needs, I believe that decisions on reorganization of the Department should not be made until the review has been completed.

Regardless of the results of the review, I do not advocate establishing specific authorities and responsibilities by statute as I explained in my answer to Question 17.

QUESTIONS FROM SENATOR JOHNSTON

Wirth Bill

Question 20: S.972, the "Radiation Research Reorganization Act of 1989" would transfer to the Secretary of Health and Human Services the authority of the Secretary of Energy to conduct epidemiological studies of the effects of radiation.

-- What would be the impact of this legislation on the health and safety of DOE workers and the public near DOE nuclear facilities?

Answer: The mission of the Department's epidemiologic research program is to understand the effects of energy generation and use and of the operation of DOE facilities on the health of workers and the public. The DOE owns these facilities and is ultimately responsible for their safe and efficient operation and, therefore, has the obligation to study and protect the health of the people working in these facilities. DOE also has the obligation for assessing the health impacts of new energy technologies being developed. No other agency in the Federal Government is more appropriately positioned to meet this moral and ethical responsibility to protect the health and safety of its workers. Transfer of the Secretary of Energy's authority to conduct epidemiologic studies would create a situation where a primary tool for meeting this responsibility is removed from the agency with management accountability. A consequence of this would be the inability to mobilize Departmental resources to address critical health issues or to translate results of epidemiologic studies into the formulation of public and occupational health policy and immediate action, if necessary.

QUESTIONS FROM SENATOR JOHNSTON

Wirth Bill

Question 21: If the bill passed, how would information about the effects of radiation be translated into action in DOE facilities? Would this process be more responsive than the current arrangements?

Answer: A key principle guiding the Secretarial Panel for the Evaluation of Epidemiologic Research Activities for the Department of Energy, is the translation of epidemiologic research into policy decisions. I can assure the committee that I intend to pay careful attention to this issue in implementing the Panel's recommendations. I have received an interim report from the Panel and their final report is due in the Spring. As we implement the Panel's recommendations, the Department's Epidemiologic Research Program will gain greater priority, authority, and resources to ensure that epidemiologic research is closely tied to policy and workplace safety implementation and that information about the effects of radiation and other nonradiological hazards is rapidly translated into action in DOE facilities.

This is substantially more difficult to assure with the slow bureaucratic process of an agency-to-agency transfer of information. If the bill passed, there could be no assurance that information would be translated rapidly into action in DOE facilities. The Department of Energy has the legal, moral, and ethical responsibility for the health and safety of its workers. Transfer of the Department's epidemiologic program would move the health effects research activities to an agency without comparable managerial responsibility, accountability and priorities.

QUESTIONS FROM SENATOR JOHNSTON

Wirth Bill

Question 22: How do researchers obtain access to DOE data and records under current arrangements? How would the bill change this?

Answer: Researchers under contract to the Department can obtain full access to records owned by the Department. The researchers, being Departmental contractors, are allowed access for specific scientific studies under the conditions of ownership as set forth in several Systems of Records notices published in the Federal Register. These researchers determine, based on their scientific expertise, which records are necessary for a study, and then copy or abstract the needed information from the records.

In order to insure the greatest possible degree of openness, the Department is establishing a mechanism for access to raw data on DOE workers via the National Academy of Sciences, and is in the process of developing a comprehensive database to further facilitate disclosure of relevant data and to foster scientific progress and cooperation with non-DOE researchers. The bill would preclude DOE funding of epidemiologic research, closing the mechanism for contractor access and development of the comprehensive database. Access to raw data cannot be guaranteed with another agency. However, I am committed to a policy of openness with the scientific community and I am implementing internal procedures to accomplish this.

QUESTIONS FROM SENATOR JOHNSTON

Wirth Bill

Question 23: What restrictions should apply to access to these data and records? Why?

Answer: The Privacy Act of 1974 was designed to protect the privacy of information on individuals. Furthermore, the Department has the obligation to protect the scientific integrity of data which it maintains. Thus, access to workers' records should be restricted to qualified scientists who can and will protect confidentiality and privacy, and who have legitimate scientific purposes for the data. There is extreme, though legitimate, sensitivity on the part of workers regarding who has access to their personnel, exposure, and medical records. Restricting access to these data helps assure the workers that the data will not be misused.

QUESTIONS FROM SENATOR JOHNSTON

Wirth Bill

Question 24: What requests for access to epidemiological data and records have been denied in the last five years? Why was this a good idea?

Answer: In the last five years there have been requests by the Three Mile Island (TMI) Fund and by several newspapers for access to several types of epidemiologic data. The TMI Fund requested access to data which constitute work-in-progress by scientists under contract to the DOE. These data are the work-product of the scientists and, because the work is in progress, their accuracy and reliability cannot be assured. The Fund also requested data from published studies of workers. These have been released to the Fund, with the exclusion of information on cause of death. Additional release of that information is not allowed under DOE's agreements with the States. No data have been released to newspapers.

The Department believes that the partial denial of the TMI Fund's request was appropriate because the collection and analysis of the worker data was ongoing and therefore incomplete; the correctness of the requested work-in-progress data could not be guaranteed. Therefore, its usage might have resulted in spurious conclusions. Furthermore, inadvertent disclosure of information on individuals, which is protected from disclosure by the Privacy Act and the States' agreements could not be guaranteed. In particular, release of information on cause of death without the prior written permission of the States--which the TMI Fund declined to seek--would have violated written agreements with some States and jeopardized our ability to obtain this information in the future. However, the Secretarial Panel for the Evaluation of Epidemiologic Research Activities is examining the Department's response to the TMI Fund.

Questions from Senator Johnston

Question 25: Title II of Senator Glenn's bill, S.1304, would give OSHA jurisdiction over employment at DOE facilities upon enactment. Do you favor this provision? If not, why not?

Answer: No, I do not favor this provision. DOE already applies most OSHA standards to its workplaces. I believe a better alternative is for OSHA to evaluate DOE's program for assuring safety and health at those GOCO's not under OSHA oversight and to recommend changes that would improve our present program. This thorough and comprehensive evaluation is expected to be underway soon. I committed to implementing a strong and aggressive DOE program on worker safety and health and believe I can do so. "Tiger Team" inspections of worker safety are being conducted at DOE contractor-operated facilities. OSHA inspectors from the Department of Labor (DOL) have participated in three of these inspections. I intend to use the results of these OSHA program evaluations and inspections to identify and correct any deficiencies in the process by which the DOE directs and oversees contractor activities to ensure that workplace safety is properly assured. New statutory authority for OSHA is not needed to accomplish this. I also believe there would be practical problems with implementing this provision as discussed below.

Questions for Senator Johnston

Question 26: What would be the practical problems with this provision?

Answer: Even if the authority over worker safety and health were transferred to OSHA, I, as the Secretary of Energy would continue to have responsibility to the workers under contract to DOE and workers in DOE owned facilities to assure adequate programs for their safety and health. OSHA authority would not negate this responsibility and in fact would duplicate the staffing and resources necessary. A better alternative, as discussed above, is to assure that the federal government has an aggressive and adequate program in place for workers.

Should the authority over safety and health be transferred to OSHA, an additional problem in implementing the transfer is that OSHA would have to recruit, staff, train and clear personnel to fulfill this expanded mission. OSHA is in a better position to discuss this problem.

QUESTIONS FROM SENATOR JOHNSTON

OSHA and DOE

Question 27: I understand that you prefer a five-year phase-in of OSHA regulation. Why would it take five years to come into compliance with this law?

Answer: I do not favor OSHA regulation of Department of Energy facilities. I do strongly endorse applicable OSHA safety and health regulations. To ensure that all these regulations and, in some cases, more stringent requirements that we consider necessary, are fully implemented in a manner that allows for physical improvements in many of the more than 10,000 buildings at our aging facilities may take five years because of budget and construction schedules. It may take less time. Certainly we will implement more effective management as quickly as we can. Based on my experience to date, the bulk of improvements should not take five years. I do not expect to be able to make a better time prediction until about the middle of next year, after we have fully assessed the experience from our cooperative agreement with OSHA.

QUESTIONS FROM SENATOR JOHNSTON

OSHA and DOE

Question 28: Under the phase-in what would happen prior to the end of the five-year period?

Answer: Please see my answer to Question 27.

QUESTIONS FROM SENATOR JOHNSTON

Whistle Blowers

Question 29:	What protections apply to employees of DOE contractors who bring to the attention of DOE or other agencies violations of law or who testify at proceedings for the enforcement of laws that apply to DOE or its contractors?
Answer:	I recognize that the Department of Energy needs to address any risk or threat to health and safety, as well as mismanagement or waste of resources, wherever they occur at our sites. To do so requires the free flow of information from all sources, including the employees of DOE contractors. Since we encourage our contractor employees to provide information on what they believe in good faith to evidence danger to public or employee health and safety; violations of law, rule or regulation; gross mismanagement; and gross waste of funds, we must ensure that they suffer no adverse consequences. The Department is therefore developing a rulemaking that will set forth clear procedures to address any complaints by contractor employees who claim they have been subjected to reprisals by their employers as a consequence of providing such information. Where the claims are found to have merit, employers will be required to afford relief, such as reinstatement, back pay, and the award of attorneys' fees. We also have supported legislative efforts to extend such protection by statute.

QUESTIONS FROM SENATOR JOHNSTON

Whistle Blowers

Question 30: Are there protections that approximate the protections available, for example, to employees of licensees of the Nuclear Regulatory Commission?

Answer: The whistleblower protection provisions applicable to employees of NRC licensees are set forth in section 210 of the Energy Reorganization Act of 1974. The Act gives to the Department of Labor authority to perform investigative and adjudicatory functions in addressing complaints of employer reprisals. The Department's proposed Rulemaking will authorize it to utilize procedures that are similar, but not identical, to those used by the Department of Labor in Section 210 cases. Currently, DOE provides for a neutral factfinding and determination of the complaint, either by disinterested elements within the Department or, where necessary, by other Federal entities.

QUESTIONS FROM SENATOR JOHNSTON

Whistle Blowers

Question 31: Should these protections be available to your contractors' employees? Why or why not?

Answer: Protection against employer reprisal for good-faith disclosure should be available to DOE contractor employees because of the great importance of the safe and efficient operation of all DOE facilities.

QUESTIONS FROM SENATOR JOHNSTON

Price-Anderson

Question 32. At the October 5 hearing, I asked you about penalties under the Price-Anderson Act, which was recently revised and extended by Congress. In response, in discussing the rulemaking process for implementing the penalty provisions of the revised Act, you said:

> "I see no reason why we should not make it clear to the contractor that just as in the private sector in the nuclear business, for example, we are going to expect them in certain circumstances to have to pick up the costs of this on their own and not be reimbursed in the government for violation of the Price-Anderson concept."

I assume by your reference to the practice with respect to licensees of the Commission ("the private sector in the nuclear business") that you mean that a contractor to the Department may have to absorb the cost of fines under the Price-Anderson Act (as do Commission licensees), but not that indemnification should be denied to a contractor because a violation was alleged to be of a severe nature, for example, gross negligence or willful misconduct. As you may know the 100th Congress defeated attempts to deny the full indemnification under the Price-Anderson Act to contractors or licensees in the case of gross negligence or willful misconduct. To deny such indemnification would compromise the original purposes of the Act, namely, to provide a kind of "no-fault" insurance so as to ensure that valid claims are paid promptly without lengthy litigation to fix blame.

Answer: Yes. I was referring to the fines and penalties provisions of the Price-Anderson Act, and not the indemnification provisions. We intend to amend our Acquisition Regulations to state that Price-Anderson penalties are not allowable costs under any circumstances. I am aware that DOE is

Answer 32:
continued:

required by the Price-Anderson Act to indemnify fully DOE contractors for public liability for a nuclear incident occurring in the United States. However, contractors can be penalized for acts of negligence by utilizing the civil penalty provisions of the Price-Anderson Act if the contractor has violated a nuclear-safety related DOE rule, regulation, or order.

QUESTIONS FROM SENATOR METZENBAUM

Contractor Indemnification

Question 1: The Inspector General's report makes for very disturbing reading. The I.G. has thoroughly documented terrible deficiencies in D.O.E.'s relationship witn its contractors, most of which stem from D.O.E.'s policy of total indemnification for contractors. I tried to correct that situation last Congress in my amendment to Price-Anderson that would allow DOE to assess and collect civil and/or criminal penalties on contractors. But the I.G. says that the DOE writes the contracts so that the contractors can just make you pay these penalties.

Why should the department indemnify contractors for violations of federal law?

Answer: The statement in the Inspector General's report that the DOE must pay penalties is a slight misstatement of DOE policy. Under current DOE policy, DOE will not pay fines and penalties where they result from lack of good faith or willful misconduct on the part of the corporate officers of the M&O contractor.

We are in the process of developing implementing procedures for the Price-Anderson fines and penalty procedures and new contract clauses reflecting the amendments made by the Price-Anderson Amendments Act of 1988. The new contract clauses will state

Answer 1
(continued): that civil and criminal penalties assessed pursuant to the Price-Anderson Amendments Act of 1988 will not be paid by the Government as an allowable cost under the contract.

The issues surrounding DOE's current policy on indemnification of its M&O contractors are complex and involve many considerations, such as the nature of the contractor's organization, the type of indemnification, private sector practice, authorities, and allowability of costs. Judgments concerning the appropriateness of the policy should not be made until DOE's ongoing study of this matter has been completed.

QUESTIONS FROM SENATOR METZENBAUM

Contractor Liability

Question 2:	In response to the I.G. Report, you indicated that you may use the award fee mechanism as an incentive for better safety and health compliance. But award fees are incorporated in only 29 of the Department's 52 active contracts and awards are only a small percentage of the contract. I have introduced legislation this year that would make contractors partially liable for actions that result from their gross negligence or willful misconduct. You stated in your confirmation hearings that you thought you could handle the contractor liability administratively and that this legislation was unnecessary. Do you now believe that legislation is needed?
Answer:	Safety and health concerns are important in all DOE management and operating contracts, and environmental compliance forms an integral part of the management and operation of all DOE facilities. The award fee mechanism now in use in 29 of DOE's management and operating contracts provides an effective method to encourage contractors to act in accord with DOE's policy of operating its facilities in an environmentally safe and sound manner, and to penalize those which do not. For those management and operating contracts which do not use the award fee mechanism, such as contracts with universities and non-profit entities, we are studying alternate approaches to encourage contractor compliance in environmental areas.

Answer 2
(continued): I still do not believe that additional legislation in this area is needed. Such legislation could severely and negatively affect DOE's ability to retain competent contractors and, more importantly, to attract new competitors, thereby jeopardizing DOE's institutional base. DOE must have the flexibility to seek regulatory and administrative solutions to the problems associated with the responsibility and accountability of contractors operating its facilities.

I have implemented a sound, well-conceived approach to change the existing management culture of the Department at all levels. As with any new initiative, time must be allowed to properly implement this approach and assess its effectiveness. Additional legislation would hinder these efforts.

QUESTIONS FROM SENATOR METZENBAUM

OSHA Inspectors and Penalties

Question 3: One of the basic initiatives in your 10-Point Plan is full compliance with OSHA standards for Department of Energy contractors. If we transfer jurisdiction for occupational safety and health at nuclear weapons plants from your department to OSHA, as Senator Glenn's bill provides, full compliance would include the assessment of civil money penalties and the possibility of criminal prosecution for egregious violations. Your response to the occupational safety and health problems at these plants has been to invite OSHA inspectors to accompany the Tiger Teams into each plant. Will the OSHA inspectors who are detailed to your Tiger Teams be allowed to assess civil money penalties or recommend criminal prosecutions for OSHA violations?

Answer: No. Under our agreement with OSHA, assessment of civil penalties or making recommendations for criminal prosecutions are not contemplated. The purpose of the "tiger teams" is to conduct comprehensive self-assessments of DOE facilities to help ensure future compliance with all ES&H requirements.

Questions from Senator Metzenbuam

OSHA Inspection of Fernald

Question 4: In a July 28th letter to Labor Secretary Dole, you requested that OSHA join DOE in inspecting key DOE defense production facilities. In this letter, you indicated you were seeking OSHA's assistance "to ensure that the Department (of Energy) is doing all it can to protect our over 140,000 contractor and DOE employees." I understand that the OSHA experts are now involved in Tiger Team inspections. But the experts were not part of the inspections that took place earlier last summer, including the inspection of Fernald. If OSHA's assistance is necessary to ensure adequate protection for workers at these plants, when will the OSHA experts inspect the Fernald facility?

Answer: OSHA assistance is not necessary to assure safety at individual facilities and has not been requested for that purpose. OSHA's expertise is being used as an outside check on DOE's programs for assuring workplace safety. OSHA experts have participated in Tiger Team inspections at three facilities. OSHA is also considering a review of our program for ensuring worker safety. I intend to look to the results of these OSHA reviews, as a sampling of our overall program, to determine whether our generic practices, standards, and oversight efforts are accomplishing all that is needed and to identify any problems. If problems are identified in our generic program, necessary changes will be implemented at all our facilities.

QUESTIONS FROM SENATOR METZENBAUM

Environmental Compliance

Question 5: Mr. Secretary, the Fernald Tiger Team assessment found that the facility is in violation of several major environmental laws, including the Clean Air Act, the Clean Water Act, RCRA, the National Environmental Policy Act, and DOE's own Order 5400.1, "The General Environmental Protection Program." These violations disturb me as they must disturb the people who live around the plant. Can you give this Committee some idea of how the DOE will bring Fernald into compliance with the law? Can you provide us with a timetable for compliance? When will you begin to implement the recommendations of the report?

Answer: The majority of environmental problems uncovered during the recent "tiger team" assessment were already known and well documented by the Department and its management and operating contractor, the Westinghouse Materials Company of Ohio (WMCO). DOE and WMCO had previously initiated numerous environmental improvement projects directed at correcting these regulatory deficiencies.

The Department has already begun to implement "tiger team" recommendations and to integrate these activities with ongoing corrective action projects. Detailed work schedules and resource requirements are currently being developed and will be available in December 1989.

Answer 5
(continued): DOE is taking specific actions to reduce air and water emissions from the Feed Materials Production Center (FMPC). These actions include:

- Installing high-efficiency particular air (HEPA) filters and a new NOx destructor to minimize radioactive and nonradioactive air emissions;
- Installing stack sampling and monitoring systems equipped with alarms on all critical dust collector systems;
- Construction of a collection system for all remaining uncontrolled storm-water runoff from the process areas; and,
- Initiating design of a state-of-the-art waste-water treatment system to reduce uranium concentrations in outfalls to the Great Miami River.

In addition, DOE is preparing an Environmental Impact Statement for the FMPC. DOE expects to issue its Record of Decision in June 1990.

QUESTIONS FROM SENATOR METZENBAUM

Whistle Blowers

Question 6(a): Earlier this year I chaired a hearing on a bill I am sponsoring with Senator Grassley, the Employee Health and Safety Whistleblower Protection Act. One of the witnesses was James Simpkin, an employee at the Hanford facility. Mr. Simpkin was retaliated against by the DOE contractor after he testified before the House Energy and Commerce Committee about safety problems at the plant. He was eventually harassed out of his job. The Deputy Secretary of Energy admitted to Congress that DOE failed to protect this courageous employee. The Occupational Safety and Health Act has whistleblower protection provisions to prevent retaliation against workers. Why should an employee cooperate with the Department's Tiger Teams if your department cannot protect employees from reprisal?

Answer: The Department of Energy can and does protect contractor employees from reprisals, and is developing a proposed rulemaking to codify such protection. As for Mr. Simpkins, the differences between him and his employer at the time he left were resolved to the satisfaction of both with no admissions by either party. His last position involved activities associated with N reactor fuels manufacturing. With the curtailment of N Reactor production operations, the need for such QA/QC positions is severely limited.

QUESTIONS FROM SENATOR METZENBAUM

Whistle Blowers

Question 6(b): Mr. Simpkin has said that he would like to be reinstated in his old position, or be brought in as part of a Tiger Team. Don't you think that he would be helpful in your investigations? Wouldn't his reinstatement underscore your message to contractors and their employees about improving the operating culture at these plants?

Answer: Mr. Simpkin decided to resign from the DOE contractor with which he was employed at Hanford. He accepted a position with an electric utility outside the Hanford area. Mr. Simpkin sought a monetary settlement for the harassment to which he felt he had been subjected, and a settlement acceptable to both parties was reached between the contractor and Mr. Simpkin.

As for your suggestions that we "reinstate" Mr. Simpkin, as he settled his dispute with his employer and voluntarily obtained other employment, he is in no sense "suspended." Therefore the notion of "reinstatement" is inapposite; Mr. Simpkin would have to apply for a position in competition with other prospective employees, many of whose efforts may be "helpful" to DOE efforts. If his skills matched the Department's needs, either for a Tiger Team or any other function, there is no reason why he would not be employed. In this time of fiscal restraint, however, it is not DOE policy to hire individuals to "underscore messages" but rather to do the work of the Department efficiently and effectively. This is especially true since the message to which you refer -- improving the operating culture at DOE plants -- is underscored in many ways on a daily basis by own words and actions.

QUESTIONS FROM SENATOR METZENBAUM

Fernald Suit

Question 7: On September 29 Judge Arthur Spiegel ruled that the Fernald residents class-action suit settlement was fair and that residents are still free to file separate legal claims in the future. DOE argued that they should not be able to file future claims. Their ability to file any such claims depends of course on their ability to prove a cause and effect relationship between their health problems and contamination from Fernald. If the DOE retains sole access and control to the relevant health and environmental data pertaining to this issue, this appears to raise a fundamental conflict of interest problem. How can DOE assure the public and the scientific community that it can responsibly report findings that might lead to legal claims against the department?

Answer: Claims for personal physical injuries by Fernald class members were specifically excluded in the Memorandum of Understanding of Settlement (MOU). DOE has not and does not argue that these claims cannot be brought in the future. Moreover, DOE has reaffirmed its intention to abide by and implement the settlement.

Access by the public to relevant health and environmental data is governed by applicable Federal and State statutes, including the Freedom of Information Act, the Privacy Act, and the corresponding State statutes dealing with privacy and freedom of information. Access to this information would also be covered by Federal and

Answer 7 (continued): State Rules of Civil Procedure when parties are engaged in litigation. In addition, DOE has announced an initiative to establish a comprehensive epidemiological data repository through which relevant data will be available to researchers.

Under the MOU, the medical monitoring and epidemiology proposed for the Fernald class members would be conducted in accordance with court-approved protocols, not by DOE.

QUESTIONS FROM SENATOR METZENBAUM

Health Effects

Question 8: The DOE employee health data, which covers 600,000 workers, are the largest and most important data set available on the health effects of low-level radiation. I believe it is imperative that these data are utilized effectively in the formulation of public and occupational health policy. In your estimation, are the DOE's health studies research findings being effectively translated into public health policy?

If DOE cannot make effective use of the DOE worker health data, it seems logical that one of our existing national health agencies can do a better job. Don't you think we have a responsibility to utilize the latest information in this field rather than allow it to be overlooked due to, as you have said, the "underfunding and understaffing" in the DOE health programs?

Answer: I agree fully with your statement that it is imperative that DOE worker health data are utilized effectively in the formulation of public and occupational health policy. DOE can, and will, make effective use of these data and I have made it clear that this is a key Departmental responsibility. I have placed increased emphasis on epidemiology throughout the Department evinced by my four-point initiative to ensure that the Department's epidemiologic research activities are appropriate, effective, and represent excellence.

My initiative includes the following elements:

- A special advisory committee has been established to provide me with an independent evaluation of DOE's current epidemiological activities and guidance on how the program should be restructured.

- The National Academy of Sciences was requested to establish a standing committee on "DOE Radiation Epidemiological Research Programs" to provide the Department with independent scientific advice.

- A Comprehensive Epidemiologic Data Resource is being established for the storage of appropriate information on past and present Department of Energy contractor employees for use by independent qualified investigators for epidemiologic research.

- Mechanisms are being developed to allow independent epidemiologic researchers access to raw data on DOE workers.

This initiative is to ensure that epidemiologic research is of the highest quality and is utilized effectively in the formulation of public and occupational health policy.

While these activities call for a review and expansion of epidemiologic activities, it must be noted that the results of DOE's health studies to-date are being effectively translated into public and occupational health policy by the national and international groups that recommend radiation protection standards. The results of these studies provide confidence that the standards, which are based on health effects related to higher levels of acute radiation exposures, protect persons with lower levels of chronic exposure. The results of the DOE studies are accepted by these independent national and international groups because they consider both the studies and their authors to have a high degree of scientific credibility.

With the Department's new emphasis on epidemiologic research, including adequate funding and staffing, acceleration of the studies' progress, and the expansion of the epidemiologic research program, concerns that the Department is not utilizing the latest information in this field should be eliminated.

QUESTIONS FROM SENATOR METZENBAUM

Rocky Flats Plant Contract

Question 9: What factors were used to select a new contractor to run the Rocky Flats Plant? What contract terms will ensure that the new contractor will behave more responsibly than the last one? Was the contract awarded competitively or was it sole-sourced? Is this contract a precedent for future ones?

Answer: EG&G of Wellesley, Massachusetts, was the only contractor considered to run the Rocky Flats facility because of the unusual and compelling urgency to maintain the facility for nuclear weapons production vital to our national defense. In particular, the facility's production of plutonium triggers is critical to the production of nuclear weapons and to maintaining the United States nuclear weapons stockpile. The specialized nature of the work, the unique and highly classified nature of the facility, and the immediate ability to perform were considerations in selecting EG&G. Following an initial contractor familiarization period, the contract terms and conditions provide for a fixed fee for calendar year 1991. Ensuing years will use an award fee with a major emphasis on environment, safety, and health considerations in accordance with

Answer 9
(continued): the Department's current policy. Further, EG&G has agreed to negotiate in good faith to incorporate into the contract any future changes in the indemnification policies of the Department. Further, we do not believe that this contract should be considered a precedent for the future, since this highly unusual and compelling circumstance is not likely to occur again.

QUESTIONS FROM SENATOR BINGAMAN

Stationing of Inspectors

Question 1: DOE reported to the House Subcommittee on Safety and Health that its Office of Safety, Health, and Quality Assurance has 125 people in its employ as of July 20, 1989. Of these 125, only 10 are stationed outside of the Washington, D.C. headquarters at DOE facilities. None are stationed at Fernald. In light of the Department's own admissions that its facilities are not in compliance with safety and health laws, aren't these facts indicative that the Department's commitment toward worker health and safety is less than its stated objectives? How can only 10 people throughout the Weapons Complex effectively enforce safety and health regulations?

Answer 1: The Department of Energy's commitment toward worker health and safety is strong. The responsibility for assuring worker health and safety rests with the line organizations that are responsible for each facility. This is the only way in which safety can be assured. No number of outside inspections can do it. I am taking actions to ensure that line managers, many of whom are stationed at the facilities, understand their responsibilities for worker safety and health, and that they are held accountable for them.

The Office of Safety, Health, and Quality Assurance (EH) provides a necessary oversight of line management's health and safety activities. This oversight is carried out by all of the EH staff, not only those stationed in the field. EH Headquarters personnel regularly travel to DOE facilities to conduct safety inspections and appraisals. They also review reports of incidents and other documentation to identify problems, to assure that line management is taking appropriate actions, and to identify the need for special inspections and appraisals.

Answer 1 continued: EH Resident Inspectors are stationed at selected DOE facilities to provide for more frequent inspection and surveillance of activities related to safety and health. Cincinnati is one of the locations at which such inspectors will be stationed, although there is not a Resident there at this time. Three inspectors are expected to be stationed at Cincinnati. The first is expected to start work in January 1990.

The safety oversight activities which have occurred at Fernald during 1989, however, serve to demonstrate the importance being placed on assuring that line management is fulfilling its responsibilities:

- A temporary EH Resident Inspector was stationed on an interim basis at Fernald during January and February. The value of an on-site EH presence was demonstrated.

- An extensive appraisal of radiation safety was performed by Headquarters personnel, with contractor support, during March. The report identified some deficiencies but also identified a sound personnel radiation monitoring program.

- A "tiger team," consisting of Headquarters staff and contractors, conducted a broad inspection of all aspects of health, safety and environmental protection during July. The final report and attendant action plan to respond to the deficiency is in preparation.

- EH Resident Inspectors from Oak Ridge conducted one-week inspections at Fernald during July and October. These were supplements to the interim program we had in January and February; the intent was to conduct a follow-up to the prior findings and to measure what progress was being made.

QUESTIONS FROM SENATOR BINGAMAN

Hazardous Waste Training

Question 2: In May 1988 the Colorado Department of Health found that Rockwell at the Rocky Flats Plant has failed to train all personnel in required hazardous waste training. There is a specific OSHA standard, the Hazardous Waste Operations and Emergency Response Standard, 29 C.F.R. 1910.120, which requires training that for personnel who handle hazardous waste. The purpose of this standard is to ensure that workers and the public are not unnecessarily exposed to dangerous chemicals and other substances. Without OSHA having any statutory power over the failure of a contractor to train there is no incentive to train workers properly. From the Department's point of view isn't it the best policy that workers be properly trained before working with toxic substances and doesn't this speak for the necessity for OSHA to come on to a site, inspect and require training wherever necessary?

Answer: A Department of Energy Order requires training of workers as required by 29 CFR 1910.120. I fully expect compliance with the Order and 29 CFR 1910.120. Our workers should certainly be well trained in working with hazardous materials. This Order does not require an OSHA review; however, it does address effective management control and training.

See also the answer to Question 25 from Senator Johnston.

QUESTIONS FROM SENATOR BINGAMAN

Five-Year Plan and Worker Training

Question 3: In the Department's Five-Year Plan released in early September no provision is made for worker occupational safety and health or worker training during the environmental restoration and waste management throughout the weapons complex. Since these jobs are inherently dangerous why would a 441-page document detailing the Department's environmental restoration and waste management neglect to mention worker health and safety?

Answer: The Five-Year Plan consolidates environmental restoration and waste management in a unified and orderly approach. The underlying concept throughout the Five-Year Plan is the need to articulate DOE policy for protection of public health and safety and the environment. Worker protection is a recurring theme throughout the document since the worker is, in most cases, the closest to the problem and, therefore, the first to be affected. In addition, the Plan recognizes the need for employees with the proper skills to work in this critical area and discusses ways the Department can obtain employees with the needed skills, including retraining employees with other skills.

Last summer, I directed also that an aggressive mandatory environmental compliance training program be implemented across the DOE complex.

Answer 3 (continued): The program was implemented in September and the first phase of the training will be provided for all Operations Offices by February 1990. Additional training will follow the first round of courses.

QUESTIONS FROM SENATOR BINGAMAN

Health Records

Question 4: The declassification of worker health records throughout the Weapons Complex is a controversial issue. The complete picture of worker health cannot be assessed until records are released. What is the current policy on declassification of those records? What reasons does DOE have in not releasing worker health records in a timely manner?

Answer: Worker health records are not classified documents; however, those maintained in a system of records are subject to the Privacy Act of 1974. The Secretarial Panel for the Evaluation of Epidemiologic Research Activities, which I established, has made several recommendations regarding the timely release of worker health records, and my staff is working actively to implement these recommendations. At the same time, it is important to note that the release of worker health records is a very sensitive issue. Workers and their representatives are greatly concerned about maintaining their privacy and the confidentiality of their personal health information maintained by their employers. We are developing a policy so that access to this information can be granted for legitimate scientific purposes, while protecting workers' rights to privacy.

As a specific example of our efforts to release worker health records in a timely manner, I call your attention to an announcement in the Federal Register to establish new routine uses for several DOE systems of records that include worker health records (Federal Register, 54:47808-15, 1989). A new routine use is proposed that would permit the disclosure of records maintained in these systems to independent researchers for purposes of conducting epidemiological studies of current and former workers at DOE facilities.

An important issue regarding our ability to release some data of epidemiologic importance is States' constraints on the release of cause of death data obtained from death certificates. At present we cannot release these data to third parties, but we are attempting to establish a mechanism through which States will allow us to release the data to investigators whose research protocols are approved by the National Academy of Sciences.

Through these activities the Department is working to overcome the legal constraints that limit the release of worker health data in a timely manner. It must be reiterated that many of these constraints exist to protect the privacy of workers and the confidentiality of the data they provide.

Questions from Senator Bingaman

Beryllium

Question 5: DOE uses beryllium in the Weapons Complex, a metal with extremely adverse health effects, which are well-known in the scientific and medical communities. Why shouldn't DOE notify and track workers exposed to beryllium?

Answer: DOE recognizes the potential adverse health effects of beryllium. The Department helped establish the standards for controlling exposure to beryllium. We are, in fact, monitoring the exposure of workers at Rocky Flats and Oak Ridge to beryllium. We are following with considerable interest a pioneering program with Jewish Hospital in Denver through which thirteen cases of Berylliosis have been diagnosed since 1965 among current and former workers at Rocky Flats. In addition, former employees who believe they have symptoms consistent with exposure to beryllium can request the Department to conduct the appropriate diagnostic tests to confirm or deny the presence of the disease.

It is evident, however, that a more aggressive approach is needed and we are looking at different mechanisms to do this. My Secretarial Panel on epidemiology is considering the issue and I expect their recommendations in the next few months.

QUESTIONS FROM SENATOR BINGAMAN

Monitoring of Former Employees

Question 6: By DOE's own admissions, workers have been exposed over a 40 year period to unknown amounts of radioactive and toxic exposures. The health effects of these exposures can be long lasting. What reasons can justify DOE not providing medical monitoring for workers once they leave the Weapons Complex?

Answer: DOE has in place now, and has had for many years, a comprehensive occupational exposure monitoring program. Many of the national and international standards and practices adopted in the nuclear industries throughout the world were supported by and/or developed by the DOE. This progressive worker protection philosophy has resulted in a DOE worker safety record that is unsurpassed in comparison to the record of the commercial industry.

While it is true that during the very early years of operation the worker monitoring program was not as rigorous as it is today, it should be noted that at that time there was only a poor understanding of the potential long-term health effects of radiation and other toxic materials. Inadequacies in monitoring procedures that occurred 30 or more years ago cannot be judged by today's standards for acceptability - they were acceptable practices at that time.

DOF, through its contractors, maintains worker health and occupational records for its present employees present contractor employees, and historical records for its former

Anser 6 continued:

employees and former contractor employees. In addition, DOE contractors conduct epidemiology studies, drawing on worker records. Except in unusual circumstances, however, i.e., specific cases of known overexposure, DOE does not routinely collect health information on workers once they leave the Weapons Complex. The DOE relies on its current standards for occupational safety, including requirements promulgated by the Occupational Safety and Health Administration, to manage health risks to acceptable levels; this is similar to the practice in other industries.

QUESTIONS FROM SENATOR BINGAMAN

Rocky Flats

Question 1: Records from a property suit filed by property owners near the Rocky Flats Plant were sealed at settlement. Recently the federal judge in the case has written the Department of Energy regarding the disposition of those records. What reason does DOE have to keep records regarding releases of radioactive and toxic materials from the public?

Answer: The "records" from the lawsuit were never sealed. The settlement of this litigation provided that all documents and materials obtained from the defendants were to be returned by the plaintiffs. This was done and these materials are now in an archive in Las Vegas, Nevada. To our knowledge, all records of past releases of radioactive materials from the Rocky Flats Plant that were used in the litigation have been public all along.

QUESTIONS FROM SENATOR BINGAMAN

Rocky Flats

Question 2: Were there significant off-site releases from the Rocky Flats plant? Where are the records for them? Were these releases monitored? [Note: The FBI, EPA, and DOE have found overwhelming evidence of off-site releases.]

Answer: DOE is not aware of any off-site releases from the Rocky Flats plant which have caused any adverse health effects or biotic extinctions. Through the plant's history, however, there have been off-site releases:

In 1973 there was a release of tritium from tritium contaminated parts that had been transferred from the Lawrence Livermore National Laboratory. These parts should not have been transferred to Rocky Flats for processing.

In 1967-1968 Rocky Flats stored waste machining solvents outdoors in the plant's 903 area. A Rocky Flats investigation was conducted (and reported in RFPINV10) in 1970, revealing that plutonium-bearing solvents had leaked in this area and contaminated the soil, and subsequently spread by wind. The area was cleaned up, and to prevent further spread of contamination, a cap (asphalt) had been placed over the area.

Answer 2 continued:

No monitoring of these accidental releases was conducted during their occurrence. However, DOE and state investigations were conducted upon their discovery.

Additionally, the plant does have off-site releases from air stacks and water discharges. The water discharges are monitored and are subject to National Pollutant Discharge Elimination System (NPDES) permits.

There is an extensive environmental monitoring program for both air and water. Records are kept by DOE as well as independently by the state.

QUESTIONS FROM SENATOR BINGAMAN

Rocky Flats

Question 3: Radioactive or toxic releases endanger people both on and off the Rocky Flats site. What studies of excess risk of adverse health effects have been done regarding releases from Rocky Flats? Where are the results of the studies? How much money and time were spent on them? How much data exists regarding these studies?

Answer: The Department has conducted studies of the workers at the site, but not of adverse health effects specifically related to releases from the site. These studies took several years to complete and the results were published in the open scientific literature. The exact cost of the studies cannot be determined, although it was in the range of several hundred thousand dollars. With DOE funding, the Colorado Department of Health is initiating a toxicologic review and dose reconstruction as part of an off-site Rocky Flats health-related studies project.

QUESTIONS FROM SENATOR BINGAMAN

Rocky Flats

Question 4:	Does DOE have evidence for unmonitored releases from the Rocky Flats Plant?
Answer:	Several unmonitored releases have occurred from Rocky Flats Plant (RFP) in addition to those accidental releases cited in the response to question 2. There were two major fires at RFP occurring in plutonium buildings: the 1957 fire in Building 771 and the 1969 fire in Building 776/777. With respect to these fires, there is no evidence of any off-site contamination.

There also were releases from the 881 Hillside area. This area was used as a burial ground for RFP wastes. This area is contaminated with volatile organic compounds (UOCs). The contamination has not spread off-site and DOE initiated measures for cleaning up the area in FY 1989. Potential volatilization and release of this contamination into the air is unmonitored.

Finally, RFP uses solvents in machining and cleaning operations. Losses from normal everyday operations occur (through volatilization). Currently, there is no standard governing their release and they are discharged by way of the emission stacks. DOE is working to eliminate the use of these solvents from RFP (and other DOE sites). For RFP, we expect complete elimination of chlorinated hydrocarbons for

Answer 4 continued:

the non-plutonium activities by March 1990; efforts to eliminate these substances on the plutonium side are anticipated to take longer.

QUESTIONS FROM SENATOR BINGAMAN

Rocky Flats

Question 5: How many undisclosed releases have occurred at the Rocky Flats Plant?

Answer: We are unaware of any undisclosed releases from the Rocky Flats Plant (RFP). In addition, the Colorado Department of Health (CDH) has had access to the plant for at least the last ten years (since the late 1970's). CDH has taken samples from all discharge streams and is responsible for the NPDES permits governing liquid plant discharges.

QUESTIONS FROM SENATOR WIRTH

Three-Mile Island Fund

Question 1: As you may recall, I joined Senator Glenn, Gore and Mitchell in sending you a letter requesting the expeditious release of data that is essential to the work of the Three Mile Island Public Health Fund. DOE denied this data to the Public Health Fund in a Freedom of Information Act request last February, and the request is still being denied today. In a written response to that request, DOE Acting Associate Director for Health and Environmental Research, Robert Wood, said that much of the data could not be released because of privacy agreements with various states.

The denial of this data to the Public Health Fund is contrary to the data utilization policies of federal public health agencies such as the CDC and NIOSH. The denial also seems contrary to your 10-point plan. What is the status of the release request and will your CEDR group -- which includes people who have previously opposed release of this information -- continue to object to the release?

Answer: The panel I established to review the Department of Energy's (DOE) epidemiology program, the Secretarial Panel for the Evaluation of Epidemiologic Research Activities (SPEERA), and the National Academy of Sciences Committee on DOE Radiation Epidemiological Research Programs are examining DOE's data release policies. Both groups are concerned with ensuring that these policies are in the best interests of public health and of the scientific community. It is essential to realize that the release of personally identified health data by Federal agencies is subject to requirements established by the Privacy Act of 1974.

In an effort to increase the availability of DOE health effects data to researchers outside of the Department, such as the Three Mile Island (TMI) Public Health Fund, the Department has proposed new routine uses for several systems of records on Department workers maintained under the Privacy Act of 1974. One of the proposed new routine uses would permit the disclosure of records maintained in these systems to independent researchers for conducting epidemiologic studies of current and former workers at DOE facilities (Federal Register, 54:47808-15, 1989).

As the TMI Fund's request was for release of data from an ongoing project, it was considered and partially denied under the allowable exemptions of the Freedom of Information Act. Some data, i.e., data analysis files from completed studies, were released to the Fund because their completeness and accuracy could be guaranteed. Other data, i.e., working database files for which we cannot guarantee the accuracy, were not released. It is not clear that this denial of access to work-in-progress differs from the data utilization policies of the Centers for Disease Control or the National Institute for Occupational Safety and Health, which operate on a case-by-case basis.

In its interim report, SPEERA recommended, "a policy of maximum possible openness with regard to the release of data to the Three Mile Island Public Health Fund." The Department is following this recommendation as it attempts to overcome any legal constraints on the release of data to the Fund. Cause of death information is provided by the States to the Department's contractors with the restrictions that these data remain the property of the State, that they are not under the control of the Department, and that they cannot be released to a third party without prior written permission. Currently, the Department is attempting to devise a mechanism through which expeditious approval can be obtained from the States to release these data to qualified investigators.

At this time I cannot attempt to assess in detail, the position of the Comprehensive Epidemiologic Data Resource (CEDR) working group or any of its members on future requests for the release of specific epidemiologic information within the Department's possession. However, I have been assured by my staff that there is full commitment to my initiatives to provide for data sharing with qualified investigators. I would like to note for the record, however, that my 10-point plan goes farther than the policies of the agencies mentioned. It provides for access to raw data and for establishment of a centralized Comprehensive Epidemiologic Data Resource containing data obtained from the workers' records to serve worker and public health needs responsibly.

QUESTIONS FROM SENATOR WIRTH

Health Data

Question 2:	You mentioned in your response to our letter and in announcing your 10-point plan that only "qualified experts" will have access to atomic worker health data sets. What constitutes a "qualified expert"?
Answer:	The Privacy Act and other legal constraints, such as agreements with the States regarding death certificate information, prevent the granting of access to data on DOE workers to anyone who so requests. However, the Department does not wish to be the sole judge of who may be granted such access. Therefore, we have asked the National Academy of Sciences to review research protocols submitted by persons requesting access, and to recommend whether access should be granted. Thus, the qualifications of someone who is requesting access to DOE data will be determined by an independent panel of the National Academy of Sciences, and what constitutes a "qualified expert" will be the panel's decision.

Questions from Senator Wirth and Senator Bingaman

OSHA Inspectors and Penalties

Question 3:	OSHA has entered into an agreement with DOE to provide assistance to accompany the DOE "tiger teams" onto weapons complex facilities. Under this agreement OSHA has no enforcement powers, whatsoever, and is acting only as a consultant. OSHA is a regulatory agency, not a consulting firm. In light of your often stated position that safety and health is to be as much a priority at the DOE weapons complex as production, what reason is there not to have OSHA with its full enforcement powers at DOE facilities?
Answer:	OSHA assistance is not necessary to assure safety at individual facilities and has not been requested for that purpose. OSHA's expertise is being used as an outside check on DOE's program for assuring workplace safety. OSHA experts have participated in "Tiger Team" inspections at three facilities. I intend to look to the results of these OSHA reviews and the results of any OSHA reviews of DOE worker safety programs, to determine whether our generic practices, standards, and oversight efforts are accomplishing all that is needed and to identify any problems. If problems are identified in our generic program, necessary changes will be implemented at all of our facilities.

Questions from Senator Wirth and Senator Bingaman

OSHA and DOE

Question 4: Some government contractors like those that build planes like the B-2 are private contractors operating their own facilities. There is as much if not more secrecy at these plants as there is in the Weapons Complex. At the private facilities, however, OSHA is able to inspect and enforce the occupational safety and health regulations. Isn't it time that DOE facilities whose secrecy is equal to those of private facilities in many instances be put on the same level for enforcement of occupational safety and health laws?

Answer: No, I do not favor this provision. DOE already applies most OSHA standards to its workplaces. New jurisdiction over exempt DOE facilities for OSHA would provide only an oversight mechanism over the implementation of these standards. Such oversight already exists within DOE, but needs to be strengthened. The "Tiger Team" inspections conducted at the DOE contractor-operated facilities with OSHA participation reinforce this conclusion. I intend to use the results of these OSHA inspections to identify and correct any deficiencies in the process by which the DOE directs and oversees contractor activities to ensure workplace safety. New statutory authority for OSHA is not needed to accomplish this. A better alternative is for OSHA to evaluate thoroughly DOE's program for assuring safety and health at DOE's GOCO's. This evaluation is expected to be underway soon. I also believe there would be practical problems with implementing this provision as discussed below.

QUESTIONS FROM SENATOR McCLURE

Environmental Compliance

Question 1(a): We are all familiar with reports in the media and from various "watch dog agencies" about the environmental, health, and safety problems at certain DOE facilities, such as West Valley, the Feed Materials Production Center, the Savannah River Production Reactors, and Rocky Flats. These reports suggest that the whole "barrel" of DOE nuclear facilities is rotten. Frankly, that is not my view of the situation. In your judgment, has there been a unilateral disregard for safety and the environment at all the DOE nuclear facilities, or are there DOE facilities, managers, and contractors that you can point to as being exceptions to the blanket charge of irresponsibility? If so, what are these exceptions?

Answer: In my judgment, there has not been unilateral disregard for health, safety, and the environment by the Department's managers and contractors. Reports in the media and from various oversight groups have focused attention on certain problems at certain DOE nuclear facilities. In recent months, I have taken important steps to begin to correct these problems.

DOE and its predecessor agencies operated the Nation's nuclear materials and weapons complex with a strong production-oriented mission. Facilities and the waste which they generated were managed by means that were considered appropriate at the time, including consideration of public

Answer 1(a)
(continued): health and safety. These practices are not adequate by today's standards and do not conform to present-day environmental laws and regulations. In truth, the Department was slow to recognize the applicability of these laws and regulations to its facilities. I intended to address this problem when I called for a "cultural change" within the Department.

Recently, a clear agenda for compliance and cleanup at DOE facilities was established. The Department's Environmental Restoration and Waste Management Five-Year Plan describes a concerted effort to correct DOE's environmental deficiencies. This Plan addressed all types and classes of the Department's waste; the facilities and sites contaminated with or used in managing that waste; and actions necessary to regain compliance with all environmental requirements. Through implementation of this Plan, the Department is committed to the goal of cleaning up all of its contaminated sites within 30 years.

QUESTIONS FROM SENATOR McCLURE

Safety Records

Question 1(b) If I am correct, all of these facilities are operated under essentially the same contractual arrangements. If there are any differences in their safety record, what has produced them? Have you determined why this difference exists?

Answer: For over four decades, the Department of Energy (DOE) and its predecessor agencies operated the Nation's nuclear materials and weapons complex with a production-oriented emphasis. The underlying operating philosophy and culture of DOE was that the adequate production of defense nuclear materials and strict environmental compliance were not compatible objectives. Virtually all of the incentives and awards have been coupled to production, much more so than all the other considerations combined. The years of inattention to changing standards and demands of environment, safety and health issues have resulted in environment, safety and health deficiencies at certain DOE facilities.

While there is no way to precisely determine the causes for deficiencies in environment and safety records at the various facilities without a detailed study, I believe several factors could have influenced the situation, including the

Answer 1(b)
(continued): following:

- mission and program priorities and responsibilities;
- age of physical facilities and complexities of operations;
- funding/budget constraints;
- depth of contractors' personnel resources;
- ability of DOE and contractors to attract and retain highly trained environmental, safety and health professionals.

QUESTION FROM SENATOR McCLURE

Safety Culture and Department Restructuring

Question 1(c): Can it be said that a "safety culture" is already in existence at some DOE nuclear facilities that could be expanded upon without a total restructuring of the Department?

Answer: There is a "safety culture" at DOE facilities; there has not been a unilateral disregard for environment, safety and health requirements by the Department's managers and contractors. However, the safety culture that exists does have weaknesses, and those weaknesses, resulting in part from complacency, have resulted in problems at the facilities. I believe that the Department's environment, safety and health culture can be greatly strengthened and problems addressed without a total restructuring of the Department. In the past several months, I have taken many important steps toward establishing a new culture of accountability within the Department in the areas of environment, safety and health. At the same time, at my direction, the Deputy Secretary and the Under Secretary are continuing their comprehensive review of the Department's organization and procedures to determine what changes should be made to improve the way in which the Department conducts its activities. Needed changes will be made.

QUESTIONS FROM SENATOR McCLURE

Exchange of Expertise Among Contractors

Question 1(d):	For example, the environmental, health and safety record at the Idaho National Engineering Laboratory (INEL) is considerably better than at Savannah River. Moreover, contractor personnel from INEL are being utilized to deal with problems at Savannah River. There is similar expertise and experience at other DOE nuclear facilities. How would you propose to facilitate an exchange of this expertise between various DOE contractors? How would you propose to effectuate this transfer of expertise in light of the fact that these contractor managers are essentially competitors?
Answer:	Exchange of expertise among contractors at DOE's nuclear facilities is a continuing effort.

In the past, the Savannah River contractor became isolated from improvements in reactor technology and operations elsewhere in the nuclear industry. DOE is now working to correct that situation. Several actions have been taken and are continuing. Since Westinghouse became the operating contractor at Savannah River, the company transferred several experienced managers from other DOE facilities operated by Westinghouse to Savannah River. In addition, other managers from the commercial nuclear sector of Westinghouse were also transferred to Savannah River. Infusion of this expertise directly into Westinghouse management at Savannah River is a critical aspect of improving operations there.

Temporary help from contractors at other DOE facilities, including the Idaho National Engineering Laboratory, also serves to transfer this expertise directly to the contractor

Answer 1(d) continued:

at Savannah River. This process is ongoing. At the working professional level, where transfer of expertise is most effective, we do not believe any competition among contract managers affects transfer of expertise.

On a broader scale, DOE sponsors many training courses, workshops, and seminars on nuclear subjects. These are attended by contractor personnel from several DOE facilities. The courses include good practices, lessons learned, discussions of events, technical innovations and results of improvements at several diverse facilities. Subjects of these courses include quality, criticality safety, prevention of incidents, radiological protection, environmental monitoring and restoration and more.

DOE publishes information on environment, health, and safety issues and performance in technical safety appraisals, environmental surveys, investigations of events, unusual occurrence reports (UOR), site representative reports and the like. These reports are available to all DOE facilities and we encourage contractors to incorporate them into their operating experience programs.

QUESTIONS FROM SENATOR McCLURE

Field Office Oversight

Question 2: a. Within DOE which field or regional management offices have experience in using the fee award as a stick, as well as a carrot, to get the contractor managers to correct existing problems at DOE nuclear facilities?

b. Are there field or regional DOE offices that have maintained "hands on" oversight on a routine basis with their contractors?

Answer: All of the DOE field offices having award fee type contracts under their cognizance have experience in using this mechanism as a management tool to achieve contractor performance consistent with DOE's priorities and missions. Admittedly, some offices have been more successful than others in this endeavor.

I want to improve significantly DOE's performance in this area, and have taken positive steps to increase DOE's leverage in using the award fee mechanism as a management tool to not only correct existing safety, health, and environmental problems, but to prevent future transgressions, while at the same time meeting mission objectives. To date, all of the award fee plans for DOE's defense production contracts have been amended to incorporate the

Answer 2 (continued): increased emphasis on environmental, safety, and health considerations and the provision that failure of the contractor to perform satisfactorily in any important area of evaluation may result in no fee earned for that period. These amended plans have been reviewed by senior DOE management at Headquarters. As the evaluation periods of the plans now in effect under the contracts are completed, we will be in a position to see the positive effects of this approach on contractor performance.

DOE's operations offices and naval reactor offices have, for many years, had "hands on" oversight of contractor operations. DOE can and will do a better job, however, to ensure that performance under our contracts occurs in a safe and environmentally clean manner.

QUESTIONS FROM SENATOR MCCLURE

Meeting NRC/EPA Guidelines

Question 2(c): Are there field office managers and contractors who have demonstrated an adherence to safety practices that would or could meet NRC/EPA guidelines?

Answer: Field office managers and contractors are responsible for complying with DOE Orders. NRC and EPA guidelines in most instances are not directly applicable to DOE's facilities and operations. Therefore, an assessment of whether field office managers and contractors have demonstrated an adherence to safety practices that would meet NRC/EPA guidelines has not been conducted. DOE safety Orders were written to be comparable to commercial industry standards and contain requirements that are derived in part from NRC and EPA guidelines. A notable example is DOE Order 5480.11, "Radiation Protection for Occupational Workers."

QUESTIONS FROM SENATOR MCCLURE

Advisory Committee

Question 2(d): Has the DOE Advisory Committee determined whether there currently are responsibly managed facilities within the DOE complex? If so, on what basis has the Committee made this determination?

Answer: The Advisory Committee on Nuclear Facility Safety has addressed technical safety issues at several DOE facilities that required assessments of several aspects of management and organization. However, a global management assessment has not been conducted by the Committee.

QUESTIONS FROM SENATOR McCLURE

Use of Award Fee

Question 3: a. Regarding use of the award fee as both a carrot and a stick, is it possible for the DOE regional field managers to effectively use this technique to foster a "safety culture", or do you believe that use of this contract management technique must be handled out of DOE headquarters?

b. If, in your opinion, this contract management technique must be controlled from headquarters, how would headquarters obtain the information necessary to make decisions on the award fee without relying on the field manager?

Answer: I believe that the award fee mechanism can still be used by the field manager as an effective tool to ensure contractor compliance with environment and safety requirements. However, the process must operate under sound management policies, with a system of checks and balances and prudent oversight by senior DOE management. I have described, in detail, my plans and objectives for this type of system in my previous testimony before you.

As part of my efforts to establish a safety culture in the Department, a variety of initiatives have been instituted to assure that continuous and accurate information concerning the activities of our contractors is provided directly to me through the program Assistant Secretaries and the Assistant

Answer 3
(continued): Secretary for Environment, Safety, and Health. To further this end, organizational realignments have been implemented to increase visibility, responsibility, and accountability. It is now DOE policy that all levels of line management are responsible and accountable for their programs.

Assistant Secretaries are required to participate in the decision on award fee evaluation factors. In addition, we have standardized many of the practices, such as the performance evaluation period and the requirement that senior field management become involved in all stages of the process, in order to improve our administration of the award fee process. In conclusion, an effective award fee process must involve both Headquarters and field personnel operating within clearly defined roles and responsibilities.

QUESTIONS FROM SENATOR McCLURE

Bids for Contracts

Question 4: Two years ago, before all this controversy about "contractor accountability" award fees, criminal investigations and civil penalties, DOE received only two bids (Westinghouse and Martin Marietta) to operate Savannah River.

a. What is the Department doing to encourage a greater number of responsible companies to bid on DOE nuclear facility management contracts?

b. Who will be available to perform these DOE management contracts in the future if this trend continues?

Answer: Certainly, the problems facing DOE and the nation with regard to the defense production facilities and the environment are great. If we fail to act quickly and prudently, we risk the deterioration of the base of contractors and potential contractors to operate these facilities. Of considerable importance is that DOE encourage good faith efforts on the part of existing contractors to be forthright in their identification of environmentally unsafe practices, and to act in a timely and responsible manner to resolve those problems.

Likewise, we must develop a system that rewards contractors for exceptional performance in all

Answer 4
(continued): areas, and provides fair and equitable indemnification to contractors for accepting the inherent risks and liabilities associated with operating a nuclear weapons facility. At the other end of the spectrum, DOE must have at its disposal the full range of legal remedies to enforce contractor compliance in areas where, through contractor negligence or misconduct, DOE would hold the contractor accountable for its actions.

Our recent initiatives and commitment to correcting the problems of the past in a fair and equitable manner will do much to encourage responsible companies' interest in operating DOE's nuclear facilities.

QUESTIONS FROM SENATOR McCLURE

Headquarters Oversight

Question 5(a): I support your efforts to realign the Department's management functions based on the principles that competent DOE and contractor management must provide the necessary leadership to foster a "safety culture" and there must be line-management accountability safety and the attainment of the highest standards of operational excellence. But it would be a mistake to assume that changes in structure alone will achieve these objectives.

I would suggest that what also has been missing is headquarter's oversight of both the DOE field offices as well as contractor managers. Therefore, the problem is how to change the mindset not only of contractor managers but of DOE personnel in the field offices and headquarters. Would you agree?

Answer: Yes. In this regard, I have initiated an aggressive course of action for the Department of Energy that includes not only an increased focus on line management's responsibility, but also incorporates a number of complementary initiatives designed to achieve operational excellence from field and contractor personnel.

A key ingredient of DOE's success will depend on filling management positions with technically qualified and capable staff, who foster a new attitude of confidence and attention to quality achievement.

QUESTIONS FROM SENATOR McCLURE

Savannah River Reorganization

Question 5(c): If I am correct you changed this structure in order to respond to the problems at Savannah River. Am I correct?

Answer: You are correct. In order to assure maximum Departmental resources were effectively focused on the safe and timely restart of the Savannah River Site reactors, I directed a number of organizational and management changes effective June 1, 1989. These changes included the direct reporting of the Manager, Savannah River Operations Office, to the Assistant Secretary for Defense Programs and the establishment of individual organizations both at the Savannah River Operations Office and at Headquarters to manage reactor restart efforts. These changes reflect my philosophy that the Department should consist of line organizations fully responsible for their own activities, including operations programs and activities related to environmental protection, radiation and reactor safety, and worker and public health and safety.

QUESTIONS FROM SENATOR McCLURE

Personnel Accountability

Question 5(b): In this regard, I would observe that as DOE is now structured the lines of management governing personnel accountability are often different than the lines of management governing the flow of program funds. Stated another way, the individuals within DOE who are superiors for the purpose of personnel decisions, such as promotions and bonuses, are often different individuals than those who are superiors for programmatic purposes.

Would you comment on how accountability can be achieved under such an arrangement, where different chains of command govern personnel and programmatic matter?

Answer: The Departmental organization structure as well as its management and operating philosophy are in transition. Prior to this year, the management concept and organizational arrangement at the Department provided for separate reporting channels to the Under Secretary level for policy development and program management (program organizations) and program execution by DOE field elements (most field organizations). This arrangement has made the clear application of line management and accountability difficult. I have begun to establish structures where program and/or funds management decisions are made by the same individuals who make or elevate personnel-related decisions to their superiors.

QUESTIONS FROM SENATOR McCLURE

Nevada Waste Management Office

QUESTION 6: A useful example in this regard is DOE's Nevada Waste Management Office. Programmatic requirements and funds flow directly from headquarters to the Nevada Office; therefore you would expect that if there is to be accountability, personnel lines also would, or should, flow directly from headquarters to the Nevada Office. However, this is not the situation; the management structure governing personnel matters flows through DOE's Nevada Regional Director to the DOE Under Secretary, without even going through the Office of Nuclear Waste at headquarters.

a. Would you comment on how accountability can be achieved under such an arrangement, where different chains of command govern personnel and programmatic matters?

ANSWER: The Department is aware of the problems associated with such an arrangement. Other programs within the Department which have had similar problems have been restructured to ensure greater line authority, responsibility and accountability for managing their field activities. I have directed that a detailed review of the civilian radioactive waste management program be undertaken to determine what organizational restructuring may be required. In a report to Congress, dated November 29, 1989, I have established a direct line of authority and responsibility for the Yucca Mountain Project. As a result, the Yucca Mountain Project Office reports directly to the Office of Civilian Radioactive Waste Management for all

QUESTION 6: (Cont'd

programmatic and policy direction and is accountable for implementing that direction.

QUESTIONS FROM SENATOR McCLURE

Restructuring the Civilian Nuclear Waste Program

QUESTION 6(b):	What are your plans for restructuring the Civilian Nuclear Waste Program?
ANSWER:	Over the past several months, the Department has undertaken an extensive review of all waste management programs, including the civilian radioactive waste management program that is implementing the Nuclear Waste Policy Act of 1982, as amended. On November 29, 1989, a report was issued on the Department's reassessment of the civilian radioactive waste management program. The report outlines the 3-point action plan I have initiated to get the program back on track and moving forward again. The plan centers on a restructuring of the Office of Civilian Radioactive Waste Management, initiatives to gain access to the Yucca Mountain candidate repository site in Nevada and an initiative for establishing integrated monitored retrievable storage for spent fuel with a target date for waste acceptance of 1998.

QUESTIONS FROM SENATOR McCLURE

Question 7(a): There are so many common issues and problems associated with the transportation of nuclear wastes by various Departmental programs, such as the defense waste program, the civilian nuclear waste program, and the WIPP program. From the standpoint of State and local governmental agencies and the public the DOE is essentially one Federal entity. How many different organizational units are now responsible for transportation of nuclear wastes?

Answer: I recently consolidated the waste transportation activities of three Headquarters programs into the new Office of Environmental Restoration and Waste Management. Additionally, the DOE Office of Civilian Radioactive Waste Management is responsible for the transportation of high-level radioactive waste and spent nuclear fuel pursuant to the Nuclear Waste Policy Act of 1982, as amended.

QUESTIONS FROM SENATOR McCLURE

Question 7(b):	Do you intend to restructure these various DOE nuclear waste transportation activities under one uniform policy and management structure?
Answer:	I expect no further restructuring of the Department's waste transportation activities other than to implement my decision to consolidate waste-related activities formerly assigned to the DOE Offices of Defense Programs, Nuclear Energy, and Energy Research into the new Office of Environmental Restoration and Waste Management. I believe this consolidation will result in a more effective management structure for these activities. At the suggestion of State and Tribal officials, DOE will consider whether to include waste-related transportation activities into its Environmental Restoration and Waste Management Five-Year Plan. I do not envision reassigning the transportation activities associated with the civilian high-level waste program to the new Office of Environmental Restoration and Waste Management.

QUESTIONS FROM SENATOR McCLURE

Rockwell Suit

Question 8: The day before DOE and Rockwell mutually agreed to terminate the Rocky Flats contract, Rockwell filed a lawsuit against DOE, EPA and the Justice Department asking for a declaratory judgment essentially telling Rockwell whether to follow EPA standards and thereby avoid potential criminal liability for on-going activities or to shut down the plant in violation of its DOE contract and risk an action for breach of contract. The Rockwell case may be moot now. But how should other DOE contractors deal with this dilemma?

Answer: There is no real dilemma. In fact, compliance with the law is itself a contractual requirement. Thus, if a DOE contractor fears that its operations might violate EPA standards, it has a contractual obligation to bring the matter to DOE's attention so that any problem can be addressed. There is, moreover, an established procedure in DOE's management and operating contracts for resolving questions regarding a contractor's obligations. As the court pointed out in the Rockwell case, Rockwell failed to use this procedure.

QUESTIONS FROM SENATOR McCLURE

Price-Anderson Act Amendments

Question 9(a): Congress adopted new civil and criminal penalties for DOE contractors as part of the 1988 Price-Anderson Amendments.

Why did the Department wait until the week before last to start a rulemaking to implement this new safety enforcement program?

Answer: We decided that it would be beneficial to review other Federal agency enforcement programs before we began to develop our safety enforcement program. Several Federal agencies have had significant experience in developing and implementing safety enforcement programs and we felt we could benefit from their experience. Therefore, DOE reviewed the enforcement policies of the Nuclear Regulatory Commission, the Environmental Protection Agency, the Research and Special Programs Administration and the Federal Aviation Administration within the Department of Transportation, and the Occupational Safety and Health Administration within the Department of Labor, as well as recommendations of the Administrative Conference of the United States. The results of this review are being evaluated and will be considered in developing our enforcement program.

QUESTIONS FROM SENATOR McCLURE

Price-Anderson Act Amendments

Question 9(b): When will DOE complete this rulemaking, including reevaluating existing safety standards (the violation of which could trigger civil penalties of $100,000 per day)?

Answer: We are in the process of developing enforcement procedures which will enable us to put an enforcement program into effect this year. Our efforts to date, as well as our future schedule are discussed below.

On September 21, 1989, DOE published in the Federal Register a Notice of Inquiry and Request for Public Comments on our plans to implement our new authority under the Price-Anderson Amendments Act of 1988 (PAAA) to subject DOE contractors, subcontractors and suppliers indemnified under the PAAA to civil penalties for violations of DOE nuclear safety rules, regulations and orders. Nineteen parties filed comments in response to the DOE Notice of Inquiry on implementation of the PAAA. These comments are being evaluated and will be considered in the Notice of Proposed Rulemaking (NOPR) that DOE intends to issue for public comment in the next few months.

Answer 9(b) continued:

The NOPR will include proposed procedures for the assessment and challenge of civil penalties, proposed safety standards the violation of which may result in penalties, and a proposed determination on whether nonprofit educational institutions should receive automatic remission of any civil penalty. A 60 day comment period and at least one hearing will be provided. A final rule should be adopted approximately 90 days after the comment period closes and any hearings are completed.

At the same time, DOE will publish a general statement of enforcement policy that is similar to the Nuclear Regulatory Commission's General Statement of Enforcement Policy applicable to its licensees. The DOE enforcement policy will not be codified through rulemaking.

Also at the same time, DOE will announce its intention to review and rewrite the requirements contained in DOE's nuclear safety orders that are applicable to DOE contractors and to publish them as proposed rules that, when finalized, will replace the existing DOE nuclear safety order system. Violations of these final nuclear safety rules also may result in a penalty under PAAA.

QUESTIONS FROM SENATOR McCLURE

Price-Anderson Act Amendments

Question 9(c): Does DOE intend to follow the notice and comment procedures set out in the Administrative Procedure Act?

Answer: Yes, as indicated in DOE's response to Question 9(b).

QUESTIONS FROM SENATOR McCLURE

Nevada's Nuclear Waste Law

Question 10: In an October 3, 1989 article in the Washington Post, the director of the Nevada Agency for Nuclear Projects said, "the State of Nevada is determined to test the foundation of the constitutional arrangement of the relationship between the states and Federal government on the (environmental permits) issue. We have not had any overtures from DOE, and I'm certain that any would be rejected out of hand."

a. Considering the State's position, does your Department plan to start court action regarding the State law prohibiting waste storage in Nevada? If so, when?

Answer: At our request, on January 25, 1990, the Department of Justice filed a lawsuit to obtain a court order requiring Nevada to act on permit applications that are needed for site characterization. The State recently announced that it would not act on the applications because they are "moot" in light of the Nevada law purporting to prohibit waste storage in the State. We are asking the court to rule that the State's position is without any legal merit.

In addition, Nevada recently filed its own lawsuit, in which it asks for a court ruling that the State has "vetoed" even consideration of the Yucca Moun-tain Site. As things now stand, this issue thus is joined in parallel lawsuits.

It is regrettable that litigation has proved necessary, but it is time to come to closure. We have restructured the repository program to get on with the job that Congress has given DOE -- investigation of the suitability of the Yucca Mountain Site. If it takes a court order to do what Congress has directed, then we will get a court order.

QUESTIONS FROM SENATOR McCLURE

Nevada's Nuclear Waste Law

Question 10(b):	Has your counsel asked the court for a declaratory judgment or has your counsel pursued any other legal course since the Governor signed the law in July?
Answer:	See answer to Question 10(a).

QUESTIONS FROM SENATOR McCLURE

Nevada and Environmental Permits

QUESTION 11: If the State of Nevada refuses to issue environmental permits, which appears to be the case outlined in the Washington Post article of October 3,

a. Is it prudent, or are there benefits to pursuing only surface based testing if the State refuses to release critical air and water permits and refuses to cooperate?

ANSWER: When DOE refers to surface based testing it includes construction of trenches and drilling of deep bore holes (up to 5,000 feet in depth). In order to accomplish these activities (trenching and drilling of bore holes), the State must issue the required clean air and clean water permits.

b. What is the technically preferred course of action?

ANSWER: The technically preferred course of action would be to conduct both surface-based testing and underground testing in the exploratory shaft facility as soon as the Department is programmatically ready to proceed.

QUESTIONS FROM SENATOR McCLURE

Surface Testing

QUESTION 12(a): In the event DOE opted for a two-year program of surface testing, who do your see as the entity or authority to determine if testing should proceed or be halted? Specifically, who will have final say for the "go", or "no go" decision?

ANSWER: I have the responsibility for determining when scientific investigations should proceed and when they should be halted.

QUESTIONS FROM SENATOR McCLURE

Surface Testing

QUESTION 12(b): What technical, procedural and political support will you utilize to support and sustain your final interpretation?

ANSWER: It is the responsibility of DOE to carry out the provisions of the Nuclear Waste Policy Act of 1982, as amended. DOE will interact with appropriate regulatory, oversight, and advisory groups. These parties include the Nuclear Waste Technical Review Board, Nuclear Regulatory Commission, Advisory Committee on Nuclear Waste, Environmental Protection Agency, Department of the Interior, Edison Electric Institute, National Academy of Sciences, the State of Nevada, affected local governments, and industry. The input from these agencies and groups will technically and procedurally support and enhance the scientific investigation activities, eventually leading to a determination by me of the suitability or unsuitability of the site for development as a repository.

QUESTIONS FROM SENATOR McCLURE

DOE-Nevada Relationship

QUESTION 13: The Congress in the conference report on the FY 1990 Energy and Water Appropriations Act directed you to "work with the State of Nevada toward issuance of environmental permits and to pursue vigorously any and all other necessary steps to allow field work to move forward." What have you done to implement this recommendation?

ANSWER: The mandated Site Characterization Plan which describes the scientific investigation program has been issued. Numerous meetings have taken place between DOE, NRC, and State technical staffs over the past year. In addition, both I and other DOE senior managers have met repeatedly with State of Nevada public officials including the Governor, the Congressional delegation and local officials.

The Department has attempted to work constructively and positively with the State of Nevada over the past years, but the State is adamantly opposed to the project and has rejected all overtures for the issuance of necessary environmental permits. DOE is, therefore, examining other alternatives, including litigation. I have requested the Department of Justice to file suit against the State of Nevada in order to gain access to the Yucca Mountain site and allow the Department to proceed with the necessary scientific investigations.

QUESTIONS FROM SENATOR McCLURE

SEDM Contract

Question 14(a): Has your Department concluded whether or not it plans to re-issue a SEDM contract to prepare the site for characterization?

Answer: The Department does not now know whether it might decide to re-issue a SEDM contract to prepare the site for characterization. Because of changing requirements and present needs of the Civilian Radioactive Waste Management Program (as announced in a report submitted to the Congress on November 29, 1989), the Department is now reexamining the need for an M&O contractor.

QUESTIONS FROM SENATOR McCLURE

SEDM Contract

Question 14(b): What is the status of the SEDM contract now that the Claims Court rejected the Bechtel award? How will the necessary services be obtained?

Answer: On October 23, 1989 we filed an appeal from the Claims Court's decision rejecting the Bechtel award. This was done in order to preserve our rights to challenge that decision. Because of changing requirements and present needs of the Civilian Radioactive Waste Management Program (as announced in a report submitted to the Congress on November 29, 1989), the Department is now reexamining the need for an M&O contractor.

QUESTIONS FROM SENATOR McCLURE

Status of OCRWM Program

QUESTION 15: Do you consider the civilian radioactive waste program a national priority? If so, why are you not filling the multitude of vacancies in the Office of Civilian Radioactive Waste Management?

ANSWER: Yes, I consider the successful implementation of the civilian radioactive waste management program a national priority.

The Office of Civilian Radioactive Waste Management (OCRWM), since its establishment in 1983, has attempted to staff up to its ceiling, but has always had some difficulty in identifying and hiring qualified candidates. Nonetheless, we continue to make every effort to seek out and recruit the best qualified candidates for positions within the office. I have recommended a highly qualified candidate, with the necessary technical background, to the White House for the position of Director of OCRWM.

QUESTIONS FROM SENATOR McCLURE

Detailing of OCRWM Personnel

Question 16: Is widely understood that key OCRWM personnel have been temporarily assigned to Defense "tiger teams"; for example, Keith Kline, Acting Deputy Director of the Office of System Integration and Regulation; Ralph Stein, Associate Director of the of the office of System Integration and Regulation; Luke Barrett, Director of Quality Assurance; and Mark Frei, Acting Director for Siting and Facilities.

a. Do you plan to replace these professionals or transfer them back to OCRWM?

Answer: An assignment to a Departmental "tiger team" is a temporary one, usually lasting from four to eight weeks. At the end of the "tiger team" assessment, the team members will be transferred back to their originating office. Thus, personnel from OCRWM who are assigned to a "tiger team" will be transferred back to OCRWM.

QUESTIONS FROM SENATOR McCLURE

Personnel Levels in OCRWM

Question 16(b):	How many people have been transferred from OCRWM to other offices within the Department and not been replaced?
Answer:	As of mid-November, OCRWM has 5 employees out of 148 on detail to other organizations within the Department. One employee is detailed to the President's Commission on Catastrophic Nuclear Accidents. Since these employees are on detail, their positions cannot be backfilled unless they leave the organization to accept positions elsewhere. Where possible, other staff have been assigned in an acting capacity to perform the duties of the detailed employees.

DALE BUMPERS ARKANSAS
WENDELL H FORD KENTUCKY
HOWARD M METZENBAUM OHIO
BILL BRADLEY NEW JERSEY
JEFF BINGAMAN NEW MEXICO
TIMOTHY E WIRTH COLORADO
KENT CONRAD NORTH DAKOTA
HOWELL T HEFLIN ALABAMA
JOHN D ROCKEFELLER IV WEST VIRGINIA

JAMES A McCLURE IDAHO
MARK O HATFIELD OREGON
PETE V DOMENICI NEW MEXICO
MALCOLM WALLOP WYOMING
FRANK H MURKOWSKI ALASKA
DON NICKLES OKLAHOMA
CONRAD BURNS MONTANA
JAKE GARN UTAH
MITCH McCONNELL KENTUCKY

DARYL OWEN STAFF DIRECTOR
D MICHAEL HARVEY CHIEF COUNSEL
FRANK M CUSHING STAFF DIRECTOR FOR THE MINORITY
GARY G ELLSWORTH CHIEF COUNSEL FOR THE MINORITY

United States Senate
COMMITTEE ON
ENERGY AND NATURAL RESOURCES
WASHINGTON, DC 20510-6150

October 6, 1989

The Honorable James D. Watkins
Secretary
U. S. Department of Energy
1000 Independence Avenue, S.W.
Washington, D.C. 20585

Dear Mr. Secretary:

I would like to thank you for providing testimony before the Committee on Energy and Natural Resources on the Department's efforts to improve the operations and management of its atomic energy defense activities and on Senate bills S. 972, S. 1304. I believe the hearing provided the members of the Committee with very valuable information.

As a followup to this hearing, I have enclosed several questions from myself and other members of the Committee for the final hearing record. Due to the nature of this hearing, I am requesting the responses to these questions be forwarded to the Committee by close of business October 30, 1989. If you have any questions concerning this request, please contact Mary Louise Wagner or Teri Curtin at 224-7569.

Thank you again,

Sincerely,

J. Bennett Johnston
Chairman

Enclosures

October 5, 1989

From Senator Johnston

Environmental Compliance

1. Senator Glenn's bill, S. 1304, contains a provision requiring the Department to enter into compliance agreements with state governments and EPA for facilities that are not in compliance with environmental laws. It does not, however, contain any remedy for failure to reach a compliance agreement among the parties.

-- What possible remedies are available for failure to conclude negotiation of a compliance agreement?

2. The contractor would not be included as a party to a compliance agreement under the Glenn bill. The same was true of the recent agreement worked out by DOE, EPA, and the state of Colorado for Rocky Flats. As I understand it, this was a bone of contention for Rockwell.

-- Wouldn't there be significant advantages to including the operating contractor as a party to a compliance agreement?

-- What would the disadvantages be?

3. How do we develop incentives to encourage all parties -- the Department, the EPA, the state, and the operating contractor -- to sit down and work out a plan that will lead to environmental compliance without disrupting the vital national security mission of these facilities?

Compliance and DOJ

4. I'd like to explore the incentives for a contractor and DOE employees to disclose violations and engage in operations that are necessary but that may result in violations of environmental laws at DOE facilities. [An example may be storage of mixed radioactive and toxic waste at one of the sites in violation of EPA rules against such storage]

On September 14, 1989, Richard B. Stewart, Assistant Attorney General for Land and Natural Resources, wrote to you and EPA Administrator Reilly about the exercise of prosecutorial discretion in the matter of Rockwell International Corporation and Rocky Flats. In this letter Stewart says that --

> "Prompt, good faith efforts by Rockwell and DOE to disclose environmental violations and reach ennvironmental compliance agreements with the State of Colorado and the United States Environmental Protection Agency would be a significant factor in any decision whether to prosecute Rockwell, its employees, and DOE employees with respect to future violations of environmental laws that occur by reason of continued operation of the plant."

Once a compliance agreement is reached, Justice's " general practice would be not to prosecute DOE employees or Rockwell or its employees for conduct undertaken in accord with and authorized by such agreements."

However, in closing the letter, Stewart says that general practice--

> "would not preclude prosecution of crimes such as false statements, perjury or obstruction of justice committed during [the period of an agreement]. It would also not preclude the use of any evidence, whether conduct or otherwise, obtained as a result of operations during this period in prosecutions of such crimes."

Evidently, this letter did not reassure Rockwell sufficiently to keep them on as a contractor at Rocky Flats.

-- What assurances do you believe a contractor should have --
(a) while a compliance agreement is being negotiated?
(b) during the operation of the agreement?

-- Do these assurances need to be statutory? Is the language of the Justice letter helpful in this regard?

Competition in Cleanup Contracting

5. There is some question whether the existing DOE contractor management structure can or will accommodate cleanup objectives both in terms of cost effectiveness and the public interest. For example,

-- Is a competitive process required to assure cost effectiveness and public confidence in the cleanup process?

6. In view of the liabilities inherent in the conflict between your responsibilities, EPA's regulations, and the interests of the states, how can you be confident that we won't wind up with only a very few large management and operations (M&O) contractors who can stand the risk?

7. One can imagine a situation in which you have a large existing M&O contractor and only a very few potential competitors, so that the distinction between competition and dividing up the work becomes pretty small. Does this concern you?

8. On the other hand, an existing M&O contractor perhaps has a big advantage in bidding for a cleanup contract because of onsite infrastructure and familiarity with the site. Yet this is the very contractor who participated to some extent in the creation of the problems to be cleaned up. Is this a cause of concern to you?

9. To what extent are cleanup activities at specific federal facilities currently being funded as part of existing M&O contracts and to what extent are these activities being bid and awarded to other contractors?

10. Would you provide for the record a list of cleanup contracts showing at least contractor, site, purposes, and amount. Specify which contracts were let competitively as new activities separate from the M&O contracts and which contracts do not provide for participation by

the M&O contractor either as the prime contractor or in joint venture arrangement.

Sovereign Immunity

11. Various groups have proposed so-called "solutions" to the problem of environmental compliance at the Department's facilities. One of these "solutions" is that the federal government be required to waive sovereign immunity to allow states to impose unilaterally civil penalties for noncompliance. The theory behind this "solution" is that it will provide states the hammer necessary to enforce compliance. I do not agree that this waiver of sovereign immunity would provide a "solution." This "solution" would result not in setting priorities to clean up the most contaminated sites first, but in allowing priorities to be set by the Governors and Attorneys General who are the most persistent and tenacious. In my opinion, this will certainly not help us in bringing about a consistent, effective policy for achieving and enforcing compliance with the environmental laws.

-- What is the Administration's position on these legislative proposals?

12. Do you believe that allowing states to impose civil penalties on federal agencies violating environmental laws would cause the agencies to comply?

13. If such civil penalties were imposed, would they be paid for in the Department's program operating budget, or paid for from the Judgment Fund?

Blue Ribbon Task Group

14. The DOD Authorization bill passed by the Senate in July included a provision setting up a Blue Ribbon Task Group to look at, among other things, the issue of environmental compliance and enforcement of compliance. The question put to the Blue Ribbon group would be how to achieve, maintain, and enforce compliance with environmental laws while minimizing interference with the national security mission of these facilities. The idea was to look at this issue from a national, big-picture, perspective and to develop an orderly process for bringing about environmental compliance. I supported this provision wholeheartedly.

-- What is your view of the Blue Ribbon Task Group?

15. Do you agree with the need to develop an orderly process for bring about environmental compliance and to maintain compliance over the long-term?

16. Do you believe that the Blue Ribbon group is an appropriate body to deal with long-term solutions for this problem?

Office of Environment, Safety, and Health

17. Senator Glenn's bill contains a title establishing an Assistant Secretary for Environment, Safety, and Health and establishing a list of responsibilites of that office. You have indicated your own plans for reorganization of that office and realignment of responsibilities within the Department.

-- What is your opinion of this title of the Glenn bill?

18. In your opinion, are there additional responsibilities that should be given to the Assistant Secretary for Environment, Safety, and Health? Or should certain responsibilities be placed elsewhere within the Department?

19. Based upon your experience to date and your own evaluation of the alignment of responsibilities within the Department, how would you propose that the Department be reorganized? Would you advocate establishing these new responsibilities by statute?

Wirth Bill

20. S.972, the "Radiation Research Reorganization Act of 1989" would transfer to the Secretary of Health and Human Services the authority of the Secretary of Energy to conduct epidemiological studies of the effects of radiation.

-- What would be the impact of this legislation on the health and safety of DOE workers and the public near DOE nuclear facilities?

21. If the bill passed, how would information about the effects of radiation be translated into action in DOE facilities? Would this process be more responsive than the current arrangements?

22. How do researchers obtain access to DOE data and records under current arrangements? How would the bill change this?

23. What restrictions should apply to access to these data and records? Why?

24. What requests for access to epidemiological data and records have been denied in the last five years? Why was this a good idea?

OSHA and DOE

25. Title II of Senator Glenn's bill, S.1304, would give OSHA jurisdiction over employment at DOE facilities upon enactment. Do you favor this provision? If not, why not?

26. What would be the practical problems with this provision?

27. I understand that you prefer a five-year phase-in of OSHA regulation. Why would it take five years to come into compliance with this law?

28. Under the phase-in what would happen prior to the end of the five-year period?

Whistle Blowers

29. What protections apply to employees of DOE contractors who bring to the attention of DOE or other agencies violations of law or who testify at proceedings for the enforcement of laws that apply to DOE or its contractors?

30. Are there protections that approximate the protections available, for example, to employees of licensees of the Nuclear Regulatory Commission?

31. Should these protections be available to your contractors' employees? Why or why not?

Price-Anderson

At the October 5 hearing, I asked you about penalties under the Price-Anderson Act, which was recently revised and extended by Congress. In response, in discussing the rule-making process for implementing the penalty provisions of the revised Act, you said:

> "I see no reason why we should not make it clear to the contractor that just as in the private sector in the nuclear business, for example, we are going to expect them in certain circumstances to have to pick up the costs of this on their own and not be reimbursed in the government for violation of the Price-Anderson concept."

I assume by your reference to the practice with respect to licensees of the Commission ("the private sector in the nuclear business") that you mean that a contractor to the Department may have to absorb the cost of fines under the Price-Anderson Act (as do Commission licensees), but not that indemnification should be denied to a contractor because a violation was alleged to be of a severe nature, for example, gross negligence or willful misconduct. As you may know the 100th Congress defeated attempts to deny the full indemnification under the Price-Anderson Act to contractors or licensees in the case of gross negligence or willful misconduct. To deny such indemnification would compromise the original purposes of the Act, namely, to provide a kind of "no-fault" insurance so as to ensure that valid claims are paid promptly without lengthy litigation to fix blame.

Question from Senator Metzenbaum

1. The Inspector General's report makes for very disturbing reading. The I.G. has thoroughly documented terrible deficiencies in D.O.E.'s relationship with its contractors, most of which stem from D.O.E.'s policy of total indemnification for contractors. I tried to correct that situation last Congress in my amendment to Price-Anderson that would allow DOE to assess and collect civil and/or criminal penalties on contractors. But the I.G. says that the DOE writes the contracts so that the contractors can just make you pay these penalties.

Why should the department indemnify contractors for violations of federal law?

Question from Senator Metzenbaum

2. In response to the I.G. Report, you indicated that you may use the award fee mechanism as an incentive for better safety and health compliance. But award fees are incorporated in only 29 of the Department's 52 active contracts and awards are only a small percentage of the contract.

I have introduced legislation this year that would make contractors partially liable for actions that result from their gross negligence or willful misconduct. You stated at your confirmation hearings that you thought you could handle the contractor liability administratively and that this legislation was unnecessary. Do you now believe that legislation is needed?

Question from Senator Metzenbaum

3. One of the basic initiatives in your 10-Point Plan is full compliance with OSHA standards for Department of Energy contractors. If we transfer jurisdiction for occupational safety and health at nuclear weapons plants from your department to OSHA, as Senator Glenn's bill provides, full compliance would include the assessment of civil money penalties and the possibility of criminal prosecution for egregious violations. Your response to the occupational safety and health problems at these plants has been to invite OSHA inspectors to accompany the Tiger Teams into each plant. Will the OSHA inspectors who are detailed to your Tiger Teams be allowed to assess civil money penalties or recommend criminal prosecutions for OSHA violations?

Question from Senator Metzenbaum

4. In a July 25th letter to Labor Secretary Dole, you requested that OSHA join DOE in inspecting key DOE defense production facilities. In this letter, you indicated you were seeking OSHA's assistance "to ensure that the Department (of Energy) is doing all it can to protect our over 140,000 contractor and DOE employees." I understand that the OSHA experts are now involved in Tiger Team inspections. But the experts were not part of the inspections that took place earlier last summer, including the inspection at Fernald. If OSHA's assistance is necessary to ensure adequate protection for workers at these plants, when will the OSHA experts inspect the Fernald facility?

Question from Senator Metzenbaum

5. Mr. Secretary the Fernald Tiger Team assessment found that the facility is in violation of several major environmental laws, including the Clean Air Act, the Clean Water Act, RCRA, the National Environmental Policy Act, and DOE's own Order 5400.1, The General Environmental Protection Program. These violations disturb me as they must disturb the people who live around the plant. Can you give this committee some idea of how the DOE will bring Fernald into compliance with the law? Can you provide us with a timetable for compliance? When will you begin to implement the recommendations of the report?

Question from Senator Metzenbaum

6. Earlier this year I chaired a hearing on a bill I am sponsoring with Senator Grassley, the Employee Health and Safety Whistleblower Protection Act. One of the witnesses was James Simpkin, an employee at the Hanford facility. Mr. Simpkin was retaliated against by the DOE contractor after he testified before the House Energy and Commerce Committee about safety problems at the plant. He was eventually harassed out of his job. The Deputy Secretary of Energy admitted to Congress that DOE failed to protect this courageous employee. The Occupational Safety and Health Act has whistleblower protection provisions to prevent retaliation against workers. Why should an employee cooperate with the Department's Tiger Teams if your department cannot protect employees from reprisal?

Mr. Simpkin has said that he would like to be reinstated in his old position, or be brought in as part of a Tiger Team. Don't you think that he would be helpful in your investigations? Wouldn't his reinstatement underscore your message to contractors and their employees about improving the operating culture at these plants?

Question from Senator Metzenbaum

7. On September 29 Judge Arthur Spiegel ruled that the Fernald residents class-action suit settlement was fair and that residents are still free to file separate legal claims in the future. DOE argued that they should not be able to file future claims. Their ability to file any such claims depends of course on their ability to prove a cause and effect relationship between their health problems and contamination from Fernald. If the DOE retains sole access and control to the relevant health and environmental data pertaining to this issue, this appears to raise a fundamental conflict of interest problem. How can DOE assure the public and the scientific community that it can responsibly report findings that might lead to legal claims against the department?

Question from Senator Metzenbaum

8. The DOE employee health data, which covers 600,000 workers, are the largest and most important data set available on the health effects of low-level radiation. I believe it is imperative that these data are utilized effectively in the formulation of public and occupational health policy. In your estimation, are the DOE's health studies research findings being effectively translated into public health policy?

If DOE cannot make effective use of the DOE worker health data, it seems logical that one of our existing national health agencies can do a better job. Don't you think we have a responsibility to utilize the latest information in this field rather than allow it to be overlooked due to, as you have said, the "underfunding and understaffing" in the DOE health programs?

Question from Senator Metzenbaum

9. What factors were used to select a new contractor to run the Rocky Flats Plant? What contract terms will ensure that the new contractor will behave more responsibly than the last one? Was the contract awarded competitively or was it sole-sourced? Is this contract a precedent for future ones?

QUESTIONS FOR SECRETARY WATKINS

From Senator Jeff Bingaman

Q: OSHA has entered into an agreement with DOE to provide assistance to accompany the DOE "tiger teams" onto Weapons Complex facilities. Under this arrangement OSHA has no enforcement powers, whatsoever, and is acting only as a consultant. OSHA is a regulatory agency, not a consulting firm. In light of your often stated position that safety and health is to be as much a priority at the DOE Weapons Complex as production, what reason is there not to have OSHA with its full enforcement powers at DOE facilities?

Q. Some government contractors ~~like~~ such as those that build planes like the B2 are private contractors operating their own facilities. There is as much if not more secrecy at these plants as there is in the Weapons Complex. At the private facilities, however, OSHA is able to inspect and enforce the occupational safety and health regulations. Isn't it time that DOE facilities whose secrecy is equal to those of private facilities in many instances be put on the same level for enforcement of occupational safety and health laws?

Q. DOE reported to the House Subcommittee on Safety and Health that its Office of Safety Health and Quality Insurance has 125 people in its employ as of July 20, 1989. Of these 125 only 10 are stationed outside of the Washington, D.C. headquarters at DOE facilities. None are stationed at

Fernald. In light of the Department's own admissions that its facilities are not in compliance with safety and health laws aren't these facts indicative that Department's commitment toward worker health and safety is less than its stated objectives? How can only 10 people throughout the Weapons Complex effectively enforce safety and health regulations?

Q. In May 1988 the Colorado Department of Health found that Rockwell at the Rocky Flats Plant had failed to train all personnel in required hazardous waste training. There is a specific OSHA standard, the Hazardous Waste Operations and Emergency Response Standard, 29 C.F.R. 1910.120, which requires training that for personnel who handle hazardous waste. The purpose of this standard is to ensure that workers and the public are not unnecessarily exposed to dangerous chemicals and other substances. Without OSHA having any statutory power over the failure of a contracter to train there is no incentive to train workers properly. From the Department's point of view isn't it the best policy that workers be properly trained before working with toxic substances and doesn't this speak for the necessity for OSHA to come on to a site, inspect and require training wherever necessary?

Q. In the Department's 5-year plan released in early September no provision is made for worker occupational safety and health or worker training during the environmental restoration and waste management throughout the Weapons Complex. Since these jobs are inherently dangerous why would a 441-page document detailing the Department's environmental restoration and waste management neglect to mention worker health and safety?

Q. The declassification of worker health records throughout the Weapons Complex is a controversial issue. The complete picture of worker health cannot be assessed until records are released. What is the current policy on declassification of those records? What reasons does DOE have in not releasing worker health records in a timely manner?

Q. DOE uses beryllium in the Weapons Complex, a metal with extremely adverse health effects, which are well-known in the scientific and medical communities. Why shouldn't DOE notify and track workers exposed to beryllium?

Q. By DOE's own admissions, workers have been exposed over a 40 year period to unknown amounts of radioactive and toxic exposures. The health effects of these exposures can be long lasting. What reasons can justify DOE not providing medical monitoring for workers once they leave the Weapons Complex?

ROCKY FLATS QUESTIONS

1. Records from a property suit filed by property owners near the Rocky Flats Plants were sealed at settlement. Recently the federal judge in the case has written the Department of Energy regarding the disposition of those records. What reason does DOE have to keep records regarding releases of radioactive and toxic materials from the public?

2. Were there significant offsite releases from the Rocky Flats plant? Where are the records for them? Were these releases monitored? [Note: The FBI, EPA, and DOE have found overwhelming evidence of offsite releases.]

3. Radioactive or toxic releases endanger people both on and off the Rocky Flats site. What studies of excess risk of adverse health effects have been done regarding releases from Rocky Flats? Where are the results of the studies? How much money and time were spent on them? How much data exists regarding these studies?

4. Does DOE have evidence for unmonitored releases from the Rocky Flats Plant?

5. How many undisclosed releases have occurred at the Rocky Flats Plant?

ADDITIONAL QUESTIONS FROM SENATOR WIRTH FOR SECRETARY WATKINS

1) As you may recall, I joined Senators Glenn, Gore and Mitchell in sending you a letter requesting the expeditious release of data that is essential to the work of the Three Mile Island Public Health Fund. DOE denied this data to the Public Health Fund in a Freedom of Information Act request last February, and the request is still being denied today. In a written response to that request, DOE Acting Associate Director for Health and Environmental Research Robert Wood said that much of the data could not be released because of privacy agreements with various states.

The denial of this data to the Public Health fund is contrary to the data utilization policies of federal public health agencies such as the CDC and NIOSH. The denial also seems contrary to your 10-point plan. What is the status of the release request and will your CEDR group -- which includes people who have previously opposed release of this information -- continue to object to the release?

2) You mentioned in your response to our letter and in announcing your 10-point plan that only "qualified experts" will have access to atomic worker health data sets. What constitutes a "qualified expert"?

3) OSHA has entered into an agreement with DOE to provide assistance to accompany the DOE "tiger teams" onto weapons complex facilities. Under this arrangement OSHA has no enforcement powers, whatsoever, and is acting only as a consultant. OSHA is a regulatory agency, not a consulting firm. In light of your often stated position that safety and health is to be as much a priority at the DOE weapons complex as production, what reason is there not to have OSHA with its full enforcement powers at DOE facilities?

4) Some government contractors like those that build planes like the B-2 are private contractors operating their own facilities. There is as much if not more secrecy at these plants as there is in the Weapons Complex. At the private facilities, however, OSHA is able to inspect and enforce the occupational safety and health regulations. Isn't it time that DOE facilities whose secrecy is equal to those of private facilities in many instances be put on the same level for enforcement of occupational safety and health laws?

QUESTIONS
DEPARTMENT OF ENERGY
COMMITTEE ON ENERGY AND NATURAL RESOURCES
OCTOBER 5, 1989

Questions from Senator McClure:

1. We are all familiar with reports in the media and from various "watch dog agencies" about the environmental, health and safety problems at certain DOE facilities, such as West Valley, the Feed Materials Production Center, the Savannah River Production Reactors and Rocky Flats. These reports suggest that the whole "barrel" of DOE nuclear facilities is rotten. Frankly, that is not my view of the situation.

   a. In your judgment, has there been a unilateral disregard for safety and the environment at all the DOE nuclear facilities, or are there DOE facilities, managers and contractors that you can point to as being exceptions to a blanket charge of irresponsibility? If so, what are these exceptions?

   b. If I am correct, all of these facilities are operated under essentially the same contractual arrangements. If there are differences in their safety records, what has produced them? Have you determined why this difference exists?

   c. Can it be said that a "safety culture" is already in existence at some DOE nuclear facilities that could be expanded upon without a total restructuring of the Department?

   d. For example, the environmental, health and safety record at the INEL (the Idaho National Engineering Laboratory) is considerably better than at Savannah River. Moreover, contractor personnel from INEL are being utilized to deal with problems at Savannah River. There is similar expertise and experience at other DOE nuclear facilities. How would you propose to facilitate an exchange of this expertise between various DOE contractors? How would you proposed to effectuate this transfer of expertise in light of the fact that these contractor managers are essentially competitors?

2. a. Within DOE which field or regional management offices have experience in usingthe fee award as a stick, as well as a carrot, to get the contractor managers to correct existing problems at DOE nuclear facilities?

   b. Are there field or regional DOE offices that have maintained "hands on" oversight on a routine basis with their contractors?

   c. Are there field office managers and contractors who have demonstrated an adherence to safety practices that would or could meet NRC/EPA guidelines?

   d. Has the DOE Advisory Committee determined whether there currently are responsibly managed facilities within the DOE complex? If so, on what basis has the Committee made this determination?

3. a. Regarding use of the award fee as both a carrot and a stick, is it possible for the DOE regional field managers to effectively use this technique to foster a "safety-culture", or do you believe that use of this contract management technique must be handled out of DOE headquarters?

   b. If, in your opinion, this contract management technique must be controlled from headquarters, how would headquarters obtain the information necessary to make decisions on the award fee without relying on the field manager?

4. Two years ago, before all this controversy about "contractor accountability" award fees, criminal investigations and civil penalties. DOE received only two bids (Westinghouse and Martin Marietta) to operate Savannah River.

   a. What is the Department doing to encourage a greater number of responsible companies to bid on DOE nuclear facility management contracts?

   b. Who will be available to perform these DOE management contracts in the future if this trend continues?

5. I support your efforts to realign the Department's management functions based on the principles that competent DOE and contractor management must provide the necessary leadership to foster a "safety culture" and there must be line-management accountability safety and the attainment of the highest standards of operational excellence. But it would be a mistake to assume that changes in structure alone will achieve these objectives.

   a. I would suggest that what also has been missing is headquarter's oversight of both the DOE field offices as well as contractor managers. Therefore, the problem is how to change the mindset not only of contractor managers but of DOE personnel in the field offices and headquarters. Would you agree?

   b. In this regard. I would observe that as DOE is now structured the lines of management governing personnel accountability are often different than the lines of management governing the flow of program funds. Stated another way, the individuals within DOE who are superiors for the purpose of personnel decisions, such as promotions and bonuses, are often different individuals than those who are superiors for programmatic purposes.

      Would you comment on how accountability can be achieved under such an arrangement, where different chains of command govern personnel and programmatic matter?

   c. If I am correct you changed this structure in order to respond to the problems at Savannah River. Am I correct?

6. A useful example in this regard is DOE's Nevada Waste Management Office. Programmatic requirements and funds flow directly from headquarters to the Nevada Office; therefore you would expect that if there is to be accountability, personnel lines also would, or should, flow directly from headquarters to the Nevada Office. However, this is not the situation; the management structure governing personnel matters flows through DOE's Nevada Regional Director to the DOE Under Secretary, without even going through the Office of Nuclear Waste at headquarters.

   a. Would you comment on how accountability can be achieved under such an arrangement, where different chains of command govern personnel and programmatic matter?

b. What are you plans for restructuring the Civilian Nuclear Waste Program?

7. There are many common issues and problems associated with the transportation of nuclear wastes by various Departmental programs, such as the defense waste program, civilian nuclear waste program, and the WIPP program. From the standpoint of State and local governmental agencies and the public the DOE is essentially one Federal entity.

   a. How many different DOE organizational units are now responsible for the transportation of nuclear wastes?

   b. Do you intend to restructure these various DOE nuclear waste transportation activities under one uniform policy and management structure?

8. The day before DOE and Rockwell mutually agreed to terminate the Rocky Flats contract, Rockwell filed a lawsuit against DOE, EPA and the Justice Department asking for a declaratory judgment essentially telling Rockwell whether to follow EPA standards and thereby avoid potential criminal liability for on-going activities or to shut down the plant in violation of its DOE contract and risk an action for breach of contract. The Rockwell case may be moot now. But how should other DOE contractors deal with this dilemma?

9. Congress adopted new civil and criminal penalties for DOE contractors as part of the 1988 Price-Anderson Amendments.

   a. Why did the Department wait until the week before last to start a rule making to implement this new safety enforcement program?

   b. When will DOE complete this rule making, including reevaluating existing safety standards (the violation of which could trigger civil penalties of $100,000 per day)?

   c. Does DOE intend to follow the notice and comment procedures set out in the Administrative Procedure Act?

10. In an October 3, 1989 article in the Washington Post, the director of the Nevada Agency for Nuclear Projects said, "the State of Nevada is determined to test the foundation of the constitutional arrangement of the relationship between the states and Federal government on the (environmental permits) issue. We have not had any overtures from DOE, and I'm certain that any would be rejected out of hand."

    a. Considering the State's position, does your Department plan to start court action regarding the State law prohibiting waste storage in Nevada? If so, when?

    b. Has your counsel asked the court for a declaratory judgment or has your counsel pursued any other legal course since the Governor signed the law in July?

11. If the State of Nevada refuses to issue environmental permits, which appears to be the case outlined in the Washington Post article of October 3,

    a. Is it prudent, or are there benefits to pursuing only surface based testing if the State refuses to release critical air and water permits and refuses to cooperate?

    b. What is the technically preferred course of action?

12. a. In the event DOE opted for a two-year program of surface testing, who do you see as the entity or authority to determine if testing should proceed or be halted? Specifically, who will have final say for the "go", "no go" decision?

    b. What technical, procedural and political support will you utilize to support and sustain your final interpretation?

13. The Congress in the conference report on the FY90 Energy and Water Appropriations Act directed you to "work with the State of Nevada toward issuance of environmental permits and to pursue vigorously any and all other necessary steps to allow field work to move forward." What have you done to implement this recommendation?

14. On August 24, 1989, the U.S. Court of Claims granted a permanent injunction prohibiting DOE from awarding to Bechtel a contract to manage and operate the high-level waste repository at Yucca Mountain. In a DOE media release dated the same day, DOE said it will review options for providing overall systems engineering development and management services to OCRWM and will determine how best to proceed with acquiring M&O contractor services.

    a. Has your Department concluded whether or not it plans to re-issue a SEDM contract to prepare the site for characterization?

    b. What is the status of the SEDM contract now that the Court of Appeals rejected the Bechtel award? How will the necessary services be obtained?

15. Do you consider the civilian radioactive waste program a national priority? If so, why are you not filling the multitude of vacancies in the Office of Civilian Radioactive Waste Management?

16. It is widely understood that key OCRWM personnel have been assigned temporarily to Defense "tiger teams"; for example, Keith Kline, Acting Deputy Director of the Office of System Integration and Regulation; Keith Stein, Associate Director of the Office of System Integration and Regulation; Like Barrett, Director of Quality Assurance; and Mark Frei, Acting Director for Siting and Facilities

    a. Do you plan on replace these professionals or transfer them back to OCRWM?

    b. How many people have been transferred from OCRWM to other offices within the Department and not been replaced?

Department of Energy
Washington, DC 20585

June 1, 1990

The Honorable J. Bennett Johnston
Chairman
Committee on Energy and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

On October 31, 1989, Stephen A. Wakefield, General Counsel gave testimony before your committee on the Department of Energy's nuclear facilities and Senate bills S. 972, S. 1304, and S. 1802. Also, at a follow-up hearing held on November 13, 1989, officials from the Department of Health and Human Services and Occupational Safety and Health Administration gave testimony on these issues before your committee.

Following the October 31 hearing you submitted written questions on behalf of yourself and Senators James A. McClure, Timothy E. Wirth and Pete V. Domenici to supplement the record. Enclosed are the answers to those questions, which also have been sent to Senators McClure, Wirth and Domenici. In addition, enclosed are responses to questions you submitted following the November 13 hearing. Please note that these are our responses as of January 1, 1990, unless the answers indicate otherwise.

If you have any questions, please have your staff call Renee Wilhite on 586-4277. She will be happy to assist.

Sincerely,

Jacqueline Knox Brown
Assistant Secretary Congressional and Intergovernmental
Affairs

Enclosures

POST-HEARING QUESTIONS AND ANSWERS
RELATING TO THE
OCTOBER 31, 1989, HEARING
BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE

WITNESS: STEPHEN A. WAKEFIELD
GENERAL COUNSEL

UNITED STATES DEPARTMENT OF ENERGY

QUESTIONS FROM SENATOR JOHNSTON

Question 1(a): The Environmental Protection Agency and Justice have taken the position that certain mixed hazardous and radioactive wastes produced at Rocky Flats and other facilities are subject to the land disposal restrictions of RCRA and that storage of these wastes violates RCRA. Every day that waste is stored, therefore, represents another day of violation. As I understand it, however, there is no operating facility in which to store these wastes. What should DOE do with these wastes?

Answer: DOE will ensure the proper storage and integrity of the wastes at the Rocky Flats Plant. In order for the Rocky Flats Plant to operate in a compliant status, DOE entered into a Federal Facility Agreement (FFA) with the Environmental Protection Agency (EPA) and the State of Colorado to allow the continued accumulation and storage of wastes, pending proper treatment and disposal. The FFA requires DOE to submit to EPA and to the State of Colorado the status of Land Disposal Restricted (LDR) wastes presently in storage at the Rocky Flats Plant and schedules to develop and implement technologies to manage the wastes. Two additional requirements of the FFA, which DOE is working to comply with, are (1) the Waste Treatment Report and (2) the Waste Treatment Plan, which will describe the treatment technologies for these waste streams. Similar FFA's are envisioned for other DOE facilities. Negotiating FFA's would

Answer 1(a)
(continued): allow DOE to store wastes for which no treatment standards exist. DOE is developing waste treatment technology in parallel with its negotiation of FFA's to permanently dispose of these wastes.

QUESTIONS FROM SENATOR JOHNSTON

Question 1(b):	How can DOE or the contractor be expected to comply with these restrictions when there is no feasible way to comply?
Answer:	DOE is now defining the difficulties in complying with these EPA regulations. DOE expects to submit a report to EPA in January that describes the wastes subject to land disposal restrictions that are stored or generated. This report will be part of the Rocky Flats Federal Facility Agreement (FFA) and will serve as a precursor to the negotiation of other site-specific FFA's. These FFA's will establish the necessary framework for DOE to achieve compliance with land disposal restrictions. Each site-specific agreement will contain an enforceable schedule and describe activities that would allow DOE to continue to store these wastes until effective treatment facilities are placed into operation.

QUESTIONS FROM SENATOR JOHNSTON

Question 1(c):	Are there facilities besides Rocky Flats that face similar problems? Which ones?
Answer:	A list of DOE sites now storing mixed wastes that will be subject to land disposal restrictions is attached.

(The information follows:)

ATTACHMENT A

Site	City	State
Mound Plant	Miamisburg	Ohio
Rocky Flats Plant	Golden	Colorado
Sandia National Labs.-Livermore	Livermore	California
Idaho National Engineering Laboratory	Idaho Falls	Idaho
Feed Materials Production Center	Fernald	Ohio
Oak Ridge Gaseous Diffusion Plant	Oak Ridge	Tennessee
Y-12 Plant	Oak Ridge	Tennessee
Oak Ridge Associated Universities	Oak Ridge	Tennessee
Oak Ridge National Laboratory	Oak Ridge	Tennessee
Paducah Gaseous Diffusion Plant	Paducah	Kentucky
Portsmouth Gaseous Diffusion Plant	Piketon	Ohio
Hanford	Richland	Washington
Lawrence Livermore National Laboratory	Livermore	California
Laboratory for Energy-Related Health Research	Davis	California
Lawrence Berkeley Laboratory	Berkeley	California
Santa Susana Field Laboratory	Canoga Park	California
Savannah River Site	Aiken	South Carolina

ATTACHMENT B*

Site	City	State
Kansas City Plant	Kansas City	Missouri
Los Alamos National Laboratory	Los Alamos	New Mexico
Pantex Plant	Amarillo	Texas
Sandia National Labs.-Albuquerque	Albuquerque	New Mexico
Argonne National Laboratory-East	Argonne	Illinois
Brookhaven National Laboratory	Upton	New York
Princeton Plasma Physics Laboratory	Princeton	New Jersey
West Valley Demonstration Project	West Valley	New York
Nevada Test Site	Las Vegas	Nevada
Weldon Spring Site	Saint Charles	Missouri
Continuous Electron Beam Accelerator Facility	Newport News	Virginia
Colonie Interim Storage Site	Colonie	New York

*Provided for information purposes only. Although these sites are storing solvent, dioxin and/or California list mixed wastes, mixed waste is not currently regulated as hazardous waste in these states.

QUESTIONS FOR DOE FROM SENATOR JOHNSTON

Question 2: A Federal Facilities Compliance Agreement was reached in September between DOE, EPA, and the State of Colorado related to the land disposal restrictions at Rocky Flats. Under the compliance agreement, DOE reached agreement with EPA and the state that they would not take administrative or civil action against DOE so long as the agreement was in force. No similar protection is provided for the contractor. In the agreement, EPA and Colorado reserved "all other rights...with respect to any person not a party" to the agreement.

(a) Why wouldn't it have been appropriate to provide a similar protection for the contractor?

Answer: DOE believes that it would have been appropriate to provide a similar protection to the DOE contractor.

QUESTIONS FROM SENATOR JOHNSTON

Rocky Flats Compliance Agreement

Question 2. A Federal Facilities Compliance Agreement was reached in September between DOE, EPA, and the State of Colorado related to the land disposal restrictions at Rocky Flats. Under the compliance agreement, DOE reached agreement with EPA and the State that they would not take administrative or civil action against DOE so long as the agreement was in force. No similar protection is provided for the contractor. In the agreement, EPA and Colorado reserved "all other rights ... with respect to any person not a party" to the agreement.

2(b) If there had been similar protection for the contractor, do you believe that Rockwell would have felt more comfortable about continued operation of the facility?

Answer: Rockwell's primary concern related to its potential criminal exposure which was embodied in the special grand jury convened for Rocky Flats. The compliance agreement could not have specifically protected Rockwell from that exposure.

QUESTIONS FROM SENATOR JOHNSTON

Rockwell

Question 3. Rockwell made the decision not to continue to operate Rocky Flats because it believed it was caught with an untenable conflict. On the one hand, each day of continued operation of the facility represented another day of environmental violation. On the other hand, its contract with DOE required operation of the facility.

3(a) Do you believe that Rockwell's decision was unreasonable?

Answer: DOE and Rockwell mutually agreed to modify the Rockwell contract to accelerate its termination date. Rockwell's stated reason for seeking the modification was, as the question suggests, its belief that there was a conflict between continuing to operate Rocky Flats and compliance with environmental laws. In our view, both compliance with applicable laws and continued operations are achievable goals. DOE believes that the letter from Assistant Attorney General Stewart should have provided Rockwell with reasonable assurance.

QUESTIONS FROM SENATOR JOHNSTON

Rockwell

Question 3(b)	Do you believe that Rockwell was asking for unreasonable and unnecessary assurances?
Answer:	To the extent that Rockwell was asking for some sort of prospective immunity from criminal prosecution for future actions, I do think that it was asking for something both unreasonable and unnecessary. To the extent that Rockwell might have been simply seeking assurances along the lines of those provided in the letter from the Department of Justice with respect to the exercise of prosecutorial discretion, I think it was acting reasonably. I believe that the Department of Justice acted responsibly and appropriately in providing the letter regarding exercise of its prosecutorial discretion.

QUESTIONS FOR DOE FROM SENATOR JOHNSTON

Question 3: Rockwell made the decision not to continue to operate Rocky Flats because it believed it was caught with an untenable conflict. On the one hand, each day of continued operation of the facility represented another day of environmental violation. On the other hand, its contract with DOE required operation of the facility.

(c) Do you believe that there is a legal way for a contractor to comply with the law in handling waste while continuing to operate the facility?

Answer: We must recognize that the history of emphasizing production over all other concerns, including environmental compliance, at DOE's production facilities has led to a situation in which full compliance is not immediately attainable. At the same time, it is essential to national security that production activities continue at these facilities. Continued production and the gradual attainment of compliance can best be made compatible through the use of compliance agreements establishing milestones toward compliance, and providing assurances that enforcement action will not be taken so long as the milestones are being met. Furthermore, in many cases cessation of operations does not resolve the problem of noncompliance. This is true, for example, with respect to materials being stored on site which are subject to the land disposal restrictions. Under present law, a contractor may be placed in technical violation of the law without regard to its intent or actions. Thus, legislation that protects DOE and its contractors while working towards compliance would be helpful.

QUESTIONS FROM SENATOR JOHNSTON

Rockwell

Question 3(d) Why should the "general practice" of the Justice Department, as articulated in the September 14, 1989 letter from Richard Stewart, be adequate protection for these employees?

Answer: Assistant Attorney General Stewart has clearly described what factors will influence a Justice Department decision to prosecute, or not prosecute, environmental violations. In particular, he has made it clear that where agreements have been reached providing for corrective steps to achieve environmental compliance, where there has been full disclosure to the relevant regulatory authorities, and where corrective action is being undertaken in accordance with the terms of the compliance agreement, the Justice Department's "general practice would be not to prosecute DOE employees or Rockwell or its employees for conduct undertaken in accord with and authorized by such agreements." In essence, the message is that a prompt, good faith effort to disclose environmental problems and to reach and implement environmental compliance agreements is the way to avoid an environmental prosecution. That is fully in accord with, and supportive of, the new culture that Admiral Watkins has brought to DOE. On the other hand, this statement of policy does not protect employees acting in good faith from overzealous prosecutors, particularly at the state level.

QUESTIONS FROM SENATOR JOHNSTON

Rockwell

Question 3(e) How would these employees be protected from prosecution by the State?

Answer: The considerations by which the Justice Department's prosecutorial discretion is governed are equally applicable to State enforcement authorities. In this regard, it is important to remember that the State of Colorado is a party to the Rocky Flats compliance agreement. Thus, the State has a direct and substantial interest in ensuring that the agreement successfully achieves its goals. Ultimately, however, the State authorities are not bound by Justice practices.

FOLLOWUP QUESTIONS FOR THE DEPARTMENT OF ENERGY

From Senator Johnston

Question 4. As I understand it, Rockwell was not included as party to the compliance agreement at Rocky Flats for a number of reasons, including ambivalence on Rockwell's part and reluctance on DOE's part. It seems to me that many of the problems could have been avoided if Rockwell had been included in the compliance negotiations.

(a) Do you agree with that conclusion?

Answer: The contractor liability issues would not have been avoided or simplified by including Rockwell in the compliance negotiations. In fact, resolution of these very complex legal and policy issues within the context of the negotiations would in all likelihood have precluded DOE, EPA and the State from meeting the established goal of an executed agreement by September 15, 1989. Two important factors influenced DOE's decision in this regard. First, EPA's proposal to have Rockwell as a party to the agreement was precedent setting and not consistent with EPA's own Federal Facility Compliance Strategy document published last year. Secondly, EPA did not inform DOE or Rockwell of its proposal until two days prior to initiation of negotiations. This made it impossible for DOE or Rockwell's to identify and resolve the complex issues raised by the proposal prior to meeting with EPA and the State. Consequently, DOE chose to proceed with negotiations in good faith, without Rockwell, in order to ensure that the established goal for execution of the agreement could be met.

(b) With the benefit of hindsight, do you believe that Rockwell should have been included as a party to the compliance agreement?

Answer: Given the circumstances discussed in the answer to 4a, and also the fact that Rockwell is no longer the M&O contractor for the Rocky Flats Plant, DOE continues to believe that Rockwell should not have been included as a party to the compliance agreement.

QUESTIONS FROM SENATOR JOHNSTON

Justice Letter

Question 5. On September 14, 1989, Richard Stewart, Assistant Attorney General for the Land and Natural Resources Division, wrote a letter to DOE and EPA. That letter states that the Justice Department's general practice would be not to prosecute DOE or Rockwell employees so long as certain conditions are met. Those conditions are that there be a compliance agreement in place, full disclosure of environmental violations, and strict adherence to the agreement. On October 5, Secretary of Energy James Watkins described this letter as setting forth "a roadmap of fairness" for continued operation of DOE's facilities. Rockwell, however, apparently did not think the letter provided sufficient assurances to continue as a contractor. Other contractors have quietly indicated similar concerns.

5(a) Do you feel that the Justice letter provides sufficient assurances for both DOE and its contractors to continue operation of facilities where there may be ongoing violations such as at Rocky Flats?

Answer: While I believe the letter to be very forthcoming and responsible, I also know that employees of DOE and its contractors have a high level of anxiety that, even if they act in good faith, prosecution under existing law is not foreclosed.

QUESTIONS FROM SENATOR JOHNSTON

Justice Letter

Question 5(b) Do your other contractors feel comfortable with the letter?

Answer: While they appreciate the letter, they remain concerned over the possibility of prosecution for criminal violations even if they act in good faith.

QUESTIONS FROM SENATOR JOHNSTON

Justice Letter

Question 5(c) Can the Department of Energy under current law protect its contractors and their employees from the risk of criminal and civil prosecution for good faith operation of federal facilities?

Answer: DOE does not make prosecutorial decisions and thus cannot directly provide protection or assurances. Hopefully, we can provide our contractors with the managerial direction necessary to avoid actions which would lead to such prosecution.

QUESTIONS FROM SENATOR JOHNSTON

Question 5(d): Do you believe that it would be appropriate for Congress to codify the Justice letter, or take action to provide necessary assurances for both DOE and its contractors?

Answer: The Department would strongly support the enactment of legislation that addresses Federal and State enforcement of environmental laws under criteria that are similar to those contained in the Department of Justice letter. Such legislation would be consistent with our current efforts to establish and implement environmental compliance agreements, and would allow the Department to operate its facilities -- without the threat of criminal prosecution for environmental violations -- during the time that compliance activities are conducted.

QUESTIONS FROM SENATOR JOHNSTON

Question 6: EG&G, Inc., has recently signed a contract with DOE to operate Rocky Flats through December 31, 1993. The contract provides for a transition period until January 1, 1990. It is my understanding that the interim contract with EG&G does not cover all issues related to operations of Rocky Flats.

Question 6a: The interim or "Letter Contract" signed with EG&G, Inc., for the operation of the Rocky Flats plant provides a general description of the terms and conditions that will apply to the negotiated contract. A Letter Contract was necessary to allow preparatory work to start immediately so EG&G could be ready to operate the Rocky Flats plant by January 1, 1990. It was not possible to have complete discussions and understanding on issues such as personnel matters, property transfers, assignment of subcontracts and bank accounts, and related matters before execution of a contract that would ensure takeover by the January 1, 1990, target date. Definitive contract negotiations were completed and the contract was signed on December 20, 1989. EG&G assumed overall management of the plant on January 1, 1990.

Question 6b: Has DOE assumed liability in the EG&G contract for environmental fines, penalties or torts?

Answer: The terms of the definitive contract provide that the Department of Energy (DOE) will generally reimburse the contractor for fines, penalties and torts resulting from performance of work under the contract. However, as you know, the Department is in the process of reviewing its policy related to these matters. The terms of the definitive contract also require EG&G to negotiate a modification to reflect the changes in DOE policy concerning these issues.

Question 6c: Has DOE needed to take any extraordinary steps to bring EG&G on to operate Rocky Flats?

Answer: In order for EG&G to begin planning to support an operational takeover by January 1, 1990, two actions were necessary which are not routine practices. These actions were: (1) to select EG&G without going through the competitive process; and (2) to enter into an interim agreement; i.e., a "Letter Contract." Both actions are, however, recognized as acceptable methods of contracting under such circumstances. No other extraordinary actions were necessary.

Question 6d:	Secretary Watkins indicated on October 5 that EG&G was familiar with the contents of the Justice letter and was aware of the issues involved at Rocky Flats. Is it your understanding that EG&G is comfortable with the Justice letter and does not feel any further assurances are necessary?
Answer:	I understand that EG&G is reasonably comfortable with the Justice letter. They have also requested a contract provision which provides that EG&G will not be held responsible for actions which occurred prior to their takeover at Rocky Flats. Our assessment is that, after discussions with Justice, as well as State of Colorado officials, EG&G has apparently determined that the concerns associated with operating Rocky Flats are acceptable.
Question 6e:	In your opinion, what differences exist between Rockwell and EG&G that would explain two companies difference in reading of the Justice letter?
Answer:	It is impossible for DOE to know the basis of these corporate decisions, and we are not certain that there are differences in the two corporations' understanding of the Justice letter.

Question 6f: Have you heard from any other DOE contractors about their concerns about liability under the current conditions?

Answer: We are aware of some concerns on the part of the contractors who operate our facilities. We have informally heard, but have not seen in writing, that several contractors have the issue of liability under internal review. For example, the Martin-Marietta Corporation, which operates our Oak Ridge facilities, agreed to only a 6-month extension of its current contract, until March 31, 1990, while they assess the liability question. We understand Martin-Marietta has retained outside legal counsel to assess the issue of liability and provide a report to its Board of Directors. The contract with the Westinghouse Idaho Nuclear Company, Inc. (WINCO) for operation of the Idaho Chemical Processing Plant was extended for an additional 45 days while the issue of liability (i.e., the policy changes and revised requirements of the Department) is discussed in more detail.

QUESTIONS FROM SENATOR JOHNSTON

EG&G

Question 7. It appears that any contractor who is an operator of a facility such as Rocky Flats will violate the law simply by operating the facility.

-- Shouldn't EG&G be concerned that the Justice Department will seek to prosecute the company for its operation of the facility in violation of the environmental laws? Why not?

Answer: I think that the letter from Assistant Attorney General Stewart should alleviate any such concern, at least with regard to actions taken prior to EG&G's assumption of management. Hopefully thereafter, EG&G will take measures in accord with the letter's assumptions.

QUESTIONS FOR DOE FROM SENATOR JOHNSTON

Question 8: Rockwell claims that DOE placed it in this untenable situation because the Department was aware of environmental violations -- and possible prosecution for those violations -- yet continued to insist that Rockwell operate the facility in violation.

-- Has the Department in the past required its contractors to perform activities that are known to be in violation of the law, either at Rocky Flats or at other facilities?

Answer: I know of no past or present Department policy or action to require its contractors to engage intentionally in knowing violation of the law in furtherance of their responsibilities under the contract.

QUESTIONS FROM SENATOR JOHNSTON

Question 9: What determines the length of the needed phase-in period? Would a shorter period be feasible? Is a longer period needed?

Answer: Over the last several years it has become evident that DOE facilities have not been managed to fully comply with workplace safety requirements. We have concluded that better control over the contractors operating DOE facilities would force the required level of safety to be achieved. Under initiatives by the Secretary, full compliance with OSHA regulations is to be achieved over the next few years. The initial phase of this effort was a cooperative agreement with OSHA to assist DOE in the inspection of three major nuclear facilities. The results have confirmed that full compliance with OSHA requirements does not exist. Successive phases include a comprehensive and thorough evaluation by OSHA of DOEs program to assure worker safety and health of GOCOs, estimates of costs for bringing these facilities into compliance to establish funding requirements, providing funding, and for implemention of improvements. These phases are expected to take several years. Until the evaluation is completed and compliance requirements assessed, a firm date cannot be established. However, we expect the process to take no more than 3-5 years.

Question 10: In your view, what would happen during the phase-in period?

a. What regulations would apply?
b. How would inspections proceed?
c. How would the regulations be enforced?

Answer: a) DOE Orders now generally require compliance with applicable OSHA regulations. Since most OSHA regulations are prescribed by DOE orders, new orders or regulations may not be necessary. New regulations to improve DOE contractor performance may be necessary, however.

b) Inspections will continue to be performed by qualified inspectors from DOE. Contractor self-appraisals are also being actively encouraged.

c) DOE enforces its orders by directing contractors, setting contract award fees partially on the basis of environmental, safety and health performance, and by its ability to terminate contracts. (See also answer to QI.)

Question 12. Title VIII of S.1802 attempts to establish incentives for states, the Department of Energy, and the EPA to enter into compliance agreements to clean up DOE nuclear facilities.

(a) What do you see as the incentives for the states under Title VIII? Are these effective incentives? Are they appropriate?

Answer: Our analysis indicates that there is only one provision of Title VIII which would be an incentive for all states. This provision is Section 806, Use of Penalties and Fines, under which the Federal government may waive sovereign immunity for fines and penalties imposed by a state. The usual purpose of fines and penalties is to create an economic disincentive for noncompliance by industries in business for profit. DOE believes that this proposal is an inappropriate method for addressing Federal facility compliance problems since the Department of Energy is not in business for economic reasons. Monetary penalties at this point would only serve to add to the overall total cost to the Federal government for bringing these facilities into compliance.

The most important factor in resolving environmental compliance problems at DOE facilities is to change the culture which for so long emphasized production at the expense of environmental concerns. Secretary Watkins has begun this process through many initiatives which are being actively implemented throughout the DOE complex.

(b) What do you see as the incentives for the Department and the EPA? Are these effective incentives? Are they appropriate?

Answer: There may be several incentives included for DOE. These may include a partial restriction on citizen suit provisions, the payment of attorney fees under some circumstances, and the liability protection provided while agreements are negotiated. As a general matter of policy, DOE supports the citizen suit provisions of environmental statutes. However, the partial restriction on these provisions could simplify enforcement actions related only to agreements. Title VIII of S.1802 limits these provisions in that the only citizens that can sue to enforce agreements are the states. DOE strongly supports the provision, Payment of Attorney Fees, and the provision which provides liability protection while agreements are negotiated. DOE believes these are effective and appropriate incentives which will facilitate identification of violations and negotiation of enforceable agreements.

The major incentive for EPA may be the authority for EPA to initiate civil judicial actions against DOE for failure to reach agreements or to enforce the agreements. DOE does not think an appropriate incentive is to allow one Federal agency to sue another Federal agency, both represented by the Department of Justice. This is contrary to the unitary executive principle under which disagreements among Executive Branch elements are to be resolved by the President or through the procedures established by Executive Orders.

QUESTIONS FROM SENATOR JOHNSTON

Question 13: If an agreement is not reached within 12 months the Attorney General or the state may institute an action in the United States District Court "to determine the content of a compliance agreement".

a. What standards would the court use to determine the content of an agreement if the bill is left as is?

b. What standards could and should be added to the bill to be used to determine this content?

Answer: a. It is the Department's view that the Federal judiciary is not the most efficient or appropriate forum for the negotiation or imposition of a complex environmental agreement. First, we believe that it is the executive branch's responsibility to negotiate and finalize compliance agreements. Second, delegating this responsibility to the judiciary would delay the resolution of compliance agreements, and perhaps even provide incentives for a recalcitrant party to refuse to participate in the negotiation process at all. We, therefore, do not support this portion of S. 1802.

Question 13. If an agreement is not reached within 12 months, the Attorney General or the state may institute an action in United States District Court "to determine the content of a compliance agreement".

(b) What standards could and should be added to the bill to be used to determine this content?

Answer: From experience with forty-seven compliance agreements with EPA and/or the states, DOE believes that it would not be useful to attempt to define standards applicable to all compliance agreements. The Bill must provide the necessary flexibility to allow each compliance agreement to be drafted to fit site-specific circumstances.

Question 14. Should the principal contractor at the DOE nuclear facility be a party to any compliance agreement?

(a) Should the legislation require this?

Answer: There may be circumstances where it is appropriate for a M&O contractor to be a party to a compliance agreement. However, the legislation should not mandate that contractors must be parties to all agreements. The Bill must allow flexibility for each agreement to address site-specific violations and actions to address the violations.

(b) What additional incentives would be required to ensure that the contractor would want to agree in the negotiating process for an agreement?

Answer: The contractors and their corporate Headquarters would have to identify any incentives which would be required to ensure that contractors would want to agree in the negotiating process.

QUESTIONS FROM SENATOR JOHNSTON

Compliance Agreements and Appropriations

- **Question 15:** What, if anything, should the bill say about the availability of appropriations to carry out the terms of a compliance agreement? For example, how should an agreement be modified if sufficient appropriations are not available to meet deadlines set forth in the agreement.

Answer: We recommend that the following statement be required by the bill to be included in compliance agreements under S. 1802.

- Nothing in this agreement shall be interpreted to require the obligation of funds in violation of the Anti-Deficiency Act, 31 U.S.C. 1341, and DOE's performance of the commitments under this Agreement shall be subject to the availability of appropriated funds for such purposes.

Question 16: Section 805 of S. 1802 would provide DOE and its contractors limited immunity from civil, criminal or administrative actions based on non-compliance during the period of negotiation of a compliance agreement. The purpose of this section is to encourage contractors and DOE employees to disclose violations and to move expeditiously toward cleaning up these problems.

a. What is your opinion on this section of S. 1802?

b. Is there any good reason why limited immunity such as this should not be provided?

c. How else do you provide incentive to come forward with violations?

Answer: a. We need to make clear to our employees and contractors that prompt good faith efforts to disclose environmental problems and to move promptly toward compliance with environmental laws are the goals of our new management culture and that these efforts will not subject those acting in good faith to criminal prosecution. We support legislative provisions which would induce individuals to fully and completely identify and correct environmental problems at our facilities, while preserving the option to prosecute individuals for past misdeeds or the failure to disclose or otherwise not act in good faith. We believe that section 805 of S. 1802

Answer 16 continued:

faithfully embodies this goal. Although there is a certain provision in section 805 that we do not support -- which was elaborated upon in my written testimony -- we support enactment of section 805 of S. 1802.

b. We feel it is essential that the option to prosecute individuals for past misdeeds or the failure to disclose or otherwise not act in good faith should be preserved. Within those limitations, the Department believes that people who have, in good faith, identified environmental violations, entered into compliance agreements, and are fulfilling their obligations under these agreements should not live in fear of criminal prosecution for ongoing incidents of non-compliance with environmental laws and regulations.

c. Under Secretary Watkins' leadership, DOE top management has sought ways to encourage employees to come forward with any knowledge of problems at DOE sites.

Answer 16 continued:

The Department's efforts to change the management culture and instill full line accountability and individual responsibility serves as a great incentive for our employees and contractors to identify instances of non-compliance and work diligently to bring them into compliance. In addition, we have established a toll-free "environmental hotline" employees can use to voice their concerns directly to the Office of Inspector General. Section 805 would enhance and intensify these efforts to encourage employee disclosures. As a top priority at DOE, we have no doubt that our hardworking, dedicated employees and contractors will rise to the challenge of running our production facilities in an environmentally safe and healthy manner. With strong, responsible management we can and will succeed at our vital mission.

Question 17. Please provide the Committee with a site-by-site list of compliance agreements that your agency is party to under any of the Federal or state environmental laws.

Answer: See attached list.

STATUS OF FEDERAL AND STATE AGREEMENTS*

Facility	Parties	Statute(s)	Date Executed
Savannah River Site	DOE/South Carolina	CAA	02/27/79
Y-12 Plant	DOE/EPA	CAA	04/14/82
Savannah River Site	DOE/South Carolina	CWA	01/03/84
Savannah River Site	DOE/South Carolina	SDWA	11/28/84
Y-12 Plant	DOE/EPA	CWA	04/17/85
Savannah River Site	DOE/South Carolina	SDWA	06/12/85
Savannah River Site	DOE/South Carolina	RCRA	07/19/85
Kansas City Plant	DOE/EPA	CERCLA	09/30/85
Savannah River Site	DOE/South Carolina	RCRA	11/07/85
Oak Ridge National Laboratory	DOE/EPA	CWA	02/12/86
Savannah River Site	DOE/South Carolina	CWA	06/20/86
Feed Materials Production Center	DOE/EPA	CERCLA/RCRA/CAA	07/19/86
Rocky Flats Plant	DOE/EPA/Colorado	CERCLA/RCRA	07/31/86
Weldon Spring Site	DOE/EPA	CERCLA/NEPA	08/22/86
Portsmouth Gaseous Diffusion Plant	DOE/EPA	RCRA	09/30/86
Hanford	DOE/Washington	RCRA	10/01/86
Savannah River Site	DOE/South Carolina	RCRA	10/06/86
Savannah River Site	DOE/South Carolina	CWA	10/06/86
Savannah River Site	DOE/EPA	CAA	01/23/87

Facility	Parties	Statute(s)	Date Executed
Lawrence Livermore National Lab	DOE/EPA	TSCA	03/19/87
Savannah River Site	DOE/South Carolina	RCRA	05/01/87
Idaho National Engineering Lab	DOE/EPA	RCRA	07/10/87
Savannah River Site	DOE/EPA	RCRA	07/30/87
Savannah River Site	DOE/South Carolina	CAA	09/04/87
Brookhaven National Lab	DOE/EPA	TSCA	09/04/87
Savannah River Site	DOE/South Carolina	SDWA	09/09/87
Lawrence Livermore National Lab (Site 300)	DOE/California	CA State Hazardous Waste Law	09/25/87
Paducah Gaseous Diffusion Plant	DOE/Kentucky	CWA	09/28/87
Savannah River Site	DOE/South Carolina	SDWA	10/07/87
Savannah River Site	DOE/South Carolina	RCRA	11/12/87
Savannah River Site	DOE/South Carolina	RCRA	11/12/87
Savannah River Site	DOE/South Carolina	RCRA	12/29/87
Western Area Power Administration	DOE/EPA	RCRA	12/30/87
Naval Petroleum Reserves - California	DOE/EPA	CAA	02/04/88
Great Plains Gasification Plant	DOE/EPA/North Dakota	CAA	03/25/88
Lawrence Livermore National Lab	DOE/EPA/California	CERCLA	11/01/88
Paducah Gaseous Diffusion Plant	DOE/EPA	CERCLA	11/04/88
Savannah River Site	DOE/South Carolina	RCRA	11/23/88
Monticello Mill Site/ Vicinity Properties	DOE/EPA/Utah	CERCLA	12/22/88
Los Alamos National Lab	DOE/EPA	CWA	02/13/89
Savannah River Site	DOE/South Carolina	RCRA	02/16/89
Hanford Site	DOE/EPA/Washington	CERCLA/RCRA	05/15/89

Kansas City Plant	DOE/EPA	RCRA	06/23/89
Rocky Flats Plant	DOE/Colorado	RCRA	07/14/89
Rocky Flats Plant	DOE/EPA/Colorado	RCRA	09/19/89
Portsmouth Gaseous Diffusion Plant	DOE/EPA	RCRA/CERCLA	09/27/89
Rocky Flats Plant	DOE/State	RCRA	11/03/89

* Total of 47 Agreements (Agreements include Federal Facility Compliance Agreements, Federal Facility Agreements, Settlement Agreements, Consent Orders.)

prepared by K. Taimi/EH-232/586-5518/disc ecd05/"fed-sta.agr"/WordPerfect

QUESTIONS FOR DOE FROM SENATOR JOHNSTON

Question 18: Can you identify all of the federal and state environmental laws that the Department of Energy and its contractors are subject to at its facilities?

Answer: Federal environmental laws to which DOE and its contractors are subject include:

National Environmental Policy Act, 42 U.S.C. §4321 _et seq_.
Clean Air Act, 42 U.S.C. §7401 _et seq_.
Clean Water Act, 33 U.S.C. §1251 _et seq_.
Solid Waste Disposal Act, 42 U.S.C. §6901 _et seq_.
Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §9601 _et seq_.
Safe Drinking Water Act, 42 U.S.C. §300f _et seq_.
Toxic Substances Control Act, 15 U.S.C. §2601 _et seq_.
Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. §136 _et seq_.
Noise Control Act, 42 U.S.C. §4901 _et seq_.
Coastal Zone Management Act, 16 U.S.C. §1451 _et seq_.
Endangered Species Act, 16 U.S.C. §1531 _et seq_.
Fish and Wildlife Coordination Act, 16 U.S.C. §661 _et seq_.
National Historic Preservation Act, 16 U.S.C. §470 _et seq_.
American Indian Religious Freedom Act, 42 U.S.C. §1996
Marine Protection, Research and Sanctuaries Act, 33 U.S.C. §1401 _et seq_.
Wild and Scenic Rivers Act, 16 U.S.C. §1271 _et seq_.
Marine Mammal Protection Act, 16 U.S.C. §1361 _et seq_.

This list may not be all-inclusive. In addition, there are other applicable statutes not usually considered "environmental laws" that address the protection of health and the environment. These include, _e.g._, the Atomic Energy Act, 42 U.S.C. §2011 _et seq_., and the Nuclear Waste Policy Act, 42 U.S.C. §10101 _et seq_.. Also, there are some applicable environmental requirements that are not reflected in the statutes. These include Executive Orders 11988 (Floodplain Management), 11990 (Protection of Wetlands) and 12088 (Federal Compliance With Pollution Control Standards).

Answer 18 (continued):

State environmental laws apply to federal activities only to the extent that Congress has specifically authorized state regulation. In recent years Congress has included provisions to this effect in the major environmental laws, including the Clean Air Act, Clean Water Act, Solid Waste Disposal Act, Safe Drinking Water Act, and the Comprehensive Environmental Response, Compensation and Liability Act. Generally, these laws contemplate a "federalist" regulatory approach under which EPA-approved state regulatory programs supplant the federal program in whole or in part. In some instances, however, States have developed programs that have not received EPA approval, and consequently there is dual regulation. Most States hosting DOE facilities have extensive regulatory programs that apply to DOE and its contractors, either in lieu of or in addition to EPA's requirements.

QUESTIONS FROM SENATOR JOHNSTON

Question 19(a):	You stated in your testimony the need for a process establishing planning and funding priorities for cleanup of DOE's facilities. I would tend to agree with this. We need to establish a mechanism that will ensure that funding is available on a predictable schedule and will ensure that the worst sites are cleaned up first. Have you given any thought to how we would set up such a process?
Answer:	The process used to develop the Environmental Restoration and Waste Management Five-Year Plan appears to have worked well. DOE Operations Offices have developed their projected needs for the budget year and four outyears based on the current year appropriation and the next year request. This information was validated by Headquarters and reviewed with outside parties before release for public comment. We are presently initiating the next cycle of this process and are considering options for an even broader public review prior to issuing an updated Five-Year Plan for the FY 1992-1996 timeframe. Repeating this process annually would provide DOE and Congress with a realistic projection of the funds that will be needed to achieve the Department's 30-year cleanup goal. Another mechanism that would aid this activity would be the establishment of a single

Question 19(a) (continued): appropriation account for the activities within the Five-Year Plan to provide the flexibility to move forward with newly-identified or evolving regulatory requirements. We are considering also the merits of establishing a separate fund to quickly initiate remedial action based on data we obtain through ongoing remedial investigations at sites located throughout the country.

QUESTIONS FROM SENATOR JOHNSTON

Question 19(b): Would you provide draft language for such a process?

Answer: The enactment of legislation would greatly assist the Department in establishing long-term requirements and procedures for planning, budgeting, and implementing environmental restoration and waste management activities at DOE facilities. The Department would be pleased to work with Congress to discuss and assist in the development of the appropriate legislative provisions to codify its 5-year planning initiative.

DOE Questions from Senator McClure:

Question 1. Is the ability of DOE to negotiate compliance agreements with States and the Environmental Protection Agency at given DOE facilities slowed down or made more difficult because the Department exposes itself and its contractor-operator to lawsuits by the very act of admitting that the facility is out of compliance?

Answer: The increased focus by the Federal investigators on criminal enforcement actions has made negotiations for compliance agreements more difficult for DOE. Also, there is increased concern about citizen civil suits while DOE is negotiating agreements with the regulators.

Question 2. (a) In your judgement, will the bill that Senator Johnston and I have introduced expedite the process of developing compliance agreements?

Answer: The Bill has several provisions which may expedite the process of developing compliance agreements.

(b) Upon a finding of noncompliance, the legislation provides for a stay of enforcement, for up to 1 year after enactment, pending negotiation by DOE, the State and EPA of a compliance agreement covering current and past waste management practices. In your judgment, will such a stay expedite compliance agreement negotiations?

Answer: Yes, the Department supports this provision of the Bill and believes that it would expedite the identification of violations and negotiation of compliance agreements.

DOE QUESTIONS FROM SENATOR McCLURE

Question 3:	**In your opinion, does this bill retain the Federal government's authority to take immediate action against new violations that might occur after the date of enactment, while negotiations are taking place on a compliance agreement?**
Answer:	Section 805(a) of S. 1802 provides generally that DOE and its contractors shall not be subject to enforcement actions for environmental violations that arise at a DOE nuclear facility while a compliance agreement for that facility is being negotiated. That general rule does not apply, however, in cases of willful misconduct that threatens human life (section 805(c)) or known violations not under negotiation (section 805(d)). DOE believes that the regulatory authorities always should be able to act immediately when necessary to protect the public health, and would have no objection if the bill were clarified to that effect. We do not believe, however, that DOE or its employees, or DOE's contractors or their employees, should be subject to sanctions for identifying violations and working in good faith with the regulatory authorities to resolve them.

Question 4. In you opinion, should this legislation require that DOE contractor operators be a party to compliance agreements, in addition to DOE, the States and EPA?

Answer: The legislation must allow the flexibility necessary so that each compliance agreement can be drafted to address site-specific circumstances. In some cases, it may be appropriate to have DOE contractors be parties to compliance agreements. However, the legislation should not mandate their participation in all agreements.

QUESTIONS FORM SENATOR WIRTH

Statement: 1.1: At least one full time OSHA inspector should be assigned to each of the major facilities to inspect and enforce safety and health standards.

Answer: DOE agrees that compliance inspection is necessary. DOE does not agree, however, with the need to assign OSHA inspectors to any exempt agency facilities. That would be redundant and costly. DOE has management personnel at all major facilities whose duties include ensuring adequate workplace safety. Further, DOE has site residents reporting directly to Headquarters that provide oversight of some major DOE and contractor workplace safety activities. Recent inspections have demonstrated that improvements are necessary. Although hiring and training of DOE residents has not been completed, at least one inspector is presently at each of 5 major sites. Fully training residents and other DOE personnel in OSHA requirements and hiring and training additional staff as a compliance matter to cover all major facilities could be undertaken, but would require additional personnel and financial resources. We are moving to strengthen these line management and oversight functions.

If OSHA were to undertake this inspection responsibility, additional resources would be required by that agency. There are 102 DOE government-owned, contractor operated facilities in 24 states exempt from OSHA oversight. How many inspectors OSHA would consider necessary requires an assessment by that agency. These facilities employ over 150,000 contractor employees.

Providing OSHA oversight of workplace safety does not diminish the responsibility of the owner, DOE, for ensuring the safety of its employees. DOE must ensure that safety through effective control of contractors managing workplaces.

QUESTION FROM SENATOR WIRTH

Statement: 1.2: OSHA should review its existing standards as well as any applicable DOE standards to determine their adequacy and promulgate new ones if necessary.

Answer: DOE Order 5480.4, "Environmental Protection, Safety and Health Protection Standards," includes a list of occupational safety and health standards which are required to be followed at DOE facilities. Applicable OSHA standards are generally cited in their entirety in this list. Other standards considered advisable for workplace safety have also been promulgated by DOE. DOE would welcome a review of its standards and the promulgation of any new standards which would improve workplace safety. In fact, in the forthcoming OSHA evaluation of worker safety and health at GOCOs, OSHA intends to review our standards and processes for ensuring worker safety and health at the GOCOs.

QUESTIONS FROM SENATOR TIMOTHY E. WIRTH

Question 1, III:	**NIOSH should be given access to existing DOE data and information concerning worker exposure to radiation and other toxic substances and should be given the authority to conduct additional epidemiological and other studies required to determine the impact these exposures have on the long term health of the workers and their families.**
Answer:	The National Institute of Occupational Safety and Health (NIOSH) already has the access and authority to conduct these studies. The Systems of Records maintained by the Department of Energy (DOE) on DOE workers specifically provide, as a routine use, that the records may be disclosed to officials of the National Institute of Occupational Safety and Health for the purpose of conducting epidemiologic studies of DOE workers at the Portsmouth Gaseous Diffusion Plant. NIOSH may also obtain access to these records at all sites because new amendments to the System of Records allow qualified investigators such access. Studies of the long term health effects on the workers' families may also be conducted by NIOSH using these data as a starting point.

QUESTIONS FROM SENATOR WIRTH

Question 1.4 Under NIOSH's direction each worker should be given a base line examination to determine his or her current health status. These examinations should be followed by an industry wide program of medical screening and surveillance to monitor the health of the workers.

Answer: DOE Order 5480.8, "Contractor Occupational Medical Program", dated 5/22/81, revised 11/6/87, includes requirements for pre-employment and periodic medical examinations as well as other means of monitoring worker's health. It is not clear what NIOSH direction would add, nor what would be the extent of the direction being proposed.

Furthermore, the Secretary of Energy established an Epidemiological Advisory Panel which, in addition to other issues, will address the need for augmented surveillance and examinations of workers to determine health impacts due to DOE facility operations.

Statement: 1.5: Joint Labor-Management Safety and Health Committees should be established at each of the facilities to supplement and monitor the OSHA inspection effort.

Answer: Joint Labor-Management Safety and Health Committees are suggested in OSHA Instruction TED 8.1, "Revised Voluntary Protection Programs, Policies and Procedures Manual", as a means of promoting employee participation in identifying and resolving occupational safety and health concerns. Some DOE facilities have such committees. A national committee has also been established. In response to Secretary Watkins' Ten Point initiative of June, 1989, the Department is moving toward full implementation of OSHA requirements and applicable programs.

QUESTIONS FROM SENATOR WIRTH

Question 1.6	All workers engaged in the clean up of toxic wastes at the facilities should be adequately and properly trained by certified safety and health training programs.
Answer:	The training of workers at hazardous waste sites is required by 29 CFR 1910.120. This OSHA regulation is prescribed by DOE and is being implemented. Certification of training programs has not yet been established, but DOE expects to obtain certification when it becomes available in CY 1990.

QUESTIONS FROM SENATOR WIRTH

Statement: 1.7: The financial and other resources necessary to carry out the new OSHA/NIOSH responsibilities should be funded out of the DOE budget.

Answer: DOE policy is to identify all items of non-compliance with OSHA standards at DOE facilities and correct them. Since many DOE facilities predate the 1970 establishment of OSHA, the major costs of implementing this policy will likely be in training employees, in the physical modification of the facilities, and in ensuring that safety and health hazards are controlled. DOE has requested and received assistance from OSHA in inspecting facilities. Resources for several other areas of regulatory oversight of DOE operations are furnished through direct appropriations for those agencies. For example, resources for EPA and GAO oversight are not provided from DOE. DOE will provide budget contingencies to anticipate the costs associated with the correction of deficiencies discovered from OSHA inspections. Resources associated with NOSH involvement in epidemiology studies are to be provided through DOE.

QUESTIONS FROM SENATOR WIRTH

Question 2: Each State faces its own environmental problems. For example, Colorado has a unique problem with uranium pollution because of old mills. Consequently, Congress wrote into Federal law provisions requiring compliance with State and Federal requirements. Corporations who operate plants in various States have to manage their plants so that each facility complies with the requirements of their host State. To argue that DOE does not have to manage its facilities in such a manner suggests a double standard in which businesses fully comply with environmental laws, and DOE does not. In DOE's five-year cleanup plan, DOE mentions conflicting environmental laws and regulations. By "conflicting," does DOE mean conflicts between environmental laws, or conflicts between Federal and more stringent State law? Congress has written compliance with State law into federal statute. Doesn't DOE's position on complying with State law conflict with the Secretary's own policy of full compliance?

Answer: The reference in DOE's *Environmental Restoration and Waste Management Five-Year Plan* to "conflicting" regulations refers to conflicts and inconsistencies within Federal regulations and their interpretations. DOE will bring its facilities into compliance with all environmental requirements. During preparation of the Five-Year Plan, DOE proposed development of uniform national standards. This concept was opposed by a number of State and Tribal representatives because of the potential infringement on State's rights to impose more stringent environmental standards and regulations. DOE is convinced that the development of consistent environmental standards

Answer 2 (continued): has substantial merit, but has deferred further debate on this topic with members of its State and Tribal Working Group.

QUESTIONS FROM SENATOR WIRTH

Question 3:	Regarding S. 1802, there is concern over the change in the definition of "solid waste." I am particularly concerned about the WIPP Exemption. Is WIPP going to be a subject of RCRA compliance or not? Is waste coming from the Rocky Flats Plant considered hazardous waste under RCRA. If WIPP is totally exempt from RCRA, who is responsible for its compliance at the site? What is the relationship of the compliance agreement section of the IA now being negotiated by DOE at their sites? Please address specifically the relationship of this section to SARA Section 120.
Answer:	If enacted, S. 1802 would exempt WIPP from RCRA. WIPP would still be required to comply with long-term disposal requirements contained in 40 CFR Part 191. Enactment of S. 1802 would, however, relieve WIPP from the administrative burden of having to comply with inconsistent EPA regulations (at 40 CFR Parts 191 and 268) for protection of the environment. DOE predicts that long-term risk to public health and safety would be negligible if the Department is relieved from having to comply with these administrative provisions.

WIPP is currently subject to compliance with RCRA provisions. The DOE submitted a "No Migration Petition" to EPA for operation of the facility. EPA published an intent to grant a conditional variance for WIPP in the Federal Register in April 6, 1990. The Department has prepared its application for a RCRA Part A "interim status" permit for

Answer 3 (continued):

submission to the New Mexico Environmental Improvement Division as soon as the State is authorized by EPA to regulate mixed waste. This authorization may occur in July 1990.

Most, but not all, of the transuranic waste generated by the Rocky Flats Plant is mixed waste containing both radionuclides regulated under the Atomic Energy Act, as amended, and hazardous chemical wastes regulated under RCRA.

There is no direct relationship between Sec. 701 of S. 1802 and the interagency agreement (IAG) being negotiated at Rocky Flats since only waste emplaced in the WIPP would be removed from RCRA coverage.

Title VIII of S. 1802 includes several provisions presently contained in compliance agreements for environmental restoration, including the content of the agreement, judicial review and enforceability of such agreements, enforcement of environmental laws pending negotiation of an agreement, imposition of fines and penalties, and the payment of attorney fees. The agreements that the Department has negotiated thus far and is currently negotiating contain nearly all of the provisions that S. 1802 would require. DOE is responsible for ensuring that all contractors (and others acting on behalf of DOE with

Answer 3 (continued): respect to matters covered by the agreements) comply with the term of the negotiated agreement.

The agreements provided for State validation of environmental data by expressly permitting access to DOE sites and for the State to implement its own quality assurance or quality control program at the laboratory (or laboratories) used by DOE in the course of completing remedial actions. Dispute resolution provisions in each agreement may vary, but each contains a provision that permits a State to seek judicial remedy after exhausting administrative remedies. Thus, a State's rights are preserved under the terms of an interagency compliance agreement.

The Department enters into an agreement for performance of remedial actions pursuant to Sections 120(a), 120(3)(1) and (2) of CERCLA; Sections 6001, 3008(h), and 3004(u) and (v) of RCRA; Executive Order 12580; the National Environmental Policy Act; and the Atomic Energy Act, as amended. Because these agreements are founded on the guidance and authorities provided to the parties by the statutes and orders listed above (including Section 120 of CERCLA) the requirements of S. 1802 appear to be largely redundant.

Answer 3 (continued): The remaining provisions for S. 1802 (namely, Sec. 805, "ENFORCEMENT OF COMPLIANCE WITH ENVIRONMENTAL LAWS PENDING COMPLETION OF AGREEMENT OF NEGOTIATION"; Sec. 806, "USE OF PENALTIES AND FINES"; and Sec. 807, "PAYMENT TO ATTORNEY FEES") are either not addressed in DOE agreements or in Section 120 of CERCLA.

QUESTIONS FOR DOE ON SECTION 7 OF S. 1802

Question 4:	Title VII of the Johnston-McClure bill exempts from RCRA source, special nuclear and by-product matter -- as well as waste placed in WIPP. Would this provision remove all state oversight of solid waste disposal for all affected types of waste? What regulations would govern the disposition of the affected solid wastes? Do EPA, DOE, and Department of Justice support this title?
Answer:	Other than excluding from RCRA any waste emplaced in WIPP or a repository developed under the Nuclear Waste Policy Act of 1982 (NWPA), Title VII of the Johnston-McClure bill simply restates current law regarding the regulation of mixed waste. Should Title VII be enacted, EPA or the States would continue to regulate the hazardous component of mixed waste (except for waste emplaced in WIPP or a NWPA repository), and DOE would continue to regulate the radioactive component. In DOE's view, the exclusion of waste emplaced in WIPP or a NWPA repository would not alter EPA's or the States' authority to regulate such waste before its emplacement. After emplacement, the waste still would be regulated by EPA's radiation protection standards, which DOE believes will provide adequate protection of the public and the environment. Although enactment of this title would simplify our efforts to establish these facilities, the Department has made the necessary filings at EPA for WIPP to comply fully with current RCRA requirements.

QUESTIONS FOR DOE ON SECTION 7 OF S. 1802

Section 7 of the S. 1802 would exempt the Waste Isolation Pilot Plant from the requirements of the Resource Conservation and Recovery Act (RCRA). Under the "Agreement for Consultation and Cooperation" on WIPP between the State of New Mexico and the Department of Energy (DOE), DOE is required to comply with all applicable Federal, State, and local standards, regulations, and laws, including any applicable standards promulgated by the Environmental Protection Agency (EPA). DOE has stated that RCRA applies to WIPP and currently has pending with EPA a petition for certification of compliance with RCRA no-migration standards at WIPP.

Question 1: If Section 7 is enacted, would any State or Federal agency other than the DOE have authority to regulate mixed waste stored or disposed of in the underground repository at WIPP?

Answer: Title VII of S. 1802 would exempt waste "emplaced" in WIPP from the definition of "solid waste" in RCRA, and therefore would exclude such waste from federal or state regulation arising out of RCRA; any treatment, transportation or handling of the waste at WIPP prior to emplacement in the repository would continue to be subject to RCRA-derived EPA and state regulation. Title VII would not alter EPA's authority to prescribe radiation protection standards for the management and disposal of WIPP wastes, because that authority is derived not from RCRA but from the Atomic Energy Act and Reorganization Plan No. 3 of 1970.

QUESTIONS FROM SENATOR DOMENICI

Section 7 of S. 1802

Question 2: What is the current status of DOE's petition to EPA for a certification of compliance with RCRA no-migration standards.

Answer: The Department submitted its petition for a no-migration variance to EPA in March, 1989. EPA published its proposed recommendation of a conditional variance in the Federal Register on April 6, 1990, for public review. The proposed variance applies only to the Test Phase. The comment period ends in June. Three public hearings are scheduled in Santa Fe, Carlsbad and Albuquerque, New Mexico. The EPA plans to make a final decision in September.

QUESTIONS FROM SENATOR DOMENICI

Section 7 of S. 1802

Question 3:	If Section 7 is not enacted, does DOE anticipate having any problem obtaining certification of compliance with the RCRA no-migration standards from the EPA?
Answer:	The Department realizes that the granting of this variance by EPA will establish a precedent and, therefore, could be subject to litigation. This could cause significant delay to the opening of the Waste Isolation Pilot Plant.

POST-HEARING QUESTIONS AND ANSWERS
RELATING TO THE
NOVEMBER 13, 1989, HEARING
BEFORE THE
COMMITTEE ON ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE

QUESTIONS FROM SENATOR JOHNSTON

Question 1(a): At the November 13 hearing before the Committee on Energy and Natural Resources, several witnesses testified that up to half of the worker radiation data compiled by the Department exists now either on tape or computer disc in a form that could readily be made available to outside researchers. One witness estimated that data on approximately 300,000 workers could be copied and made available at very little cost fairly quickly.

Is this true? How much data now exists in a usable form?

Answer: Selected data derived from records on approximately 70,000 workers exist as computer tapes that could be copied fairly quickly, and made available at a cost of $500 for each tape. These data comprise analysis files from published studies on workers at Hanford, Rocky Flats, Oak Ridge National Laboratory, and the Y-12 plant. Data on an additional 180,000 workers exist in usable form, but these data are currently being analyzed for the preparation of scientific reports to appear in peer-reviewed journals. Both sets of data include information on cause-of-death, obtained from the States under restrictive licensing agreements, which cannot be released without approval of the States. Of course, "raw data" on all present and former workers exist as hard copy, microfilm, and computer tape at each DOE site and at Federal Data Repositories. The "raw data" owned by the Department are available, and in contrast to the above-mentioned data, have not been subject to any assumptions or decisions made by DOE-supported research scientists.

QUESTIONS FROM SENATOR JOHNSTON

Question 1(b): For the data that now exists on tape or computer disc, what would be the cost to copy that data and make it available to outside researchers? How long would it take to make that data available?

Answer: The cost of copying the analysis files would be approximately $2,500 for those currently existing; and, assuming that any required State approvals have been obtained, it would take only a few days to make them available. These analysis file data, with the published study and data documentation, should provide the qualified secondary user with sufficient information to analyze that data.

QUESTIONS FROM SENATOR JOHNSTON

Question 1(c): For the data that is not considered to be a usable form, what needs to be done to put it into a usable form? What would be the cost to do that? How long would it take to do that?

Answer: For some of the data, validity would have to be assured. Only roster data (i.e., workers' names and Social Security numbers) on approximately 150,000 workers exist. Other than "raw data," no information exists on approximately 200,000 workers. Thus, substantial resources in the range of $30 M would be required to identify, collect, validate, and prepare these data for analysis. It will take, with appropriate additional personnel, approximately 4-5 years.

QUESTIONS FROM SENATOR JOHNSTON

Question 1(d): Is the worker radiation data considered classified? If so, what makes it classified? What would need to be done to declassify the data?

Answer: No, worker radiation data are not considered classified.

QUESTIONS FROM SENATOR JOHNSTON

Question 1(e): Please describe the various forms of worker radiation data, i.e., what is considered "raw data," what is considered part of the "integrated data base files," and what are the "data analysis files"?

Answer: Raw data are considered to comprise hard copy, microfilm, and computer tapes on individual workers maintained at each DOE site or at Federal Repositories, as well as death certificates maintained by each State. These data include personnel, payroll, work history, radiation exposure, and area monitoring data. The data were collected by the operating contractors in the routine operation of the facilities; they were not developed or collected for epidemiologic purposes.

There are no "integrated" databases, per se. While the data for analysis are being prepared, the raw data are entered into computer data files for various types of processing to validate and link the raw data. This intermediate phase of data preparation is an ongoing process and has not been formally or uniformly defined. Data in this form require considerable additional checking, validation, and interpretation before it can be considered for use in analyses. Even after these processes, much of this data, often called Intermediate File Data, are not completely validated or reliably linked.

Subsets of these data are subject to complete validation when they are selected for specific studies and are put into a format appropriate for epidemiologic and statistical analysis. These subsets are called "data analysis" files or Analysis File Data.

QUESTIONS FROM SENATOR JOHNSTON

Question 1(f): Is worker radiation data maintained in any other form than those mentioned above? Please describe any other worker radiation data maintained by the Department.

Answer: These data are collected and maintained by DOE contractors. No other radiation data are maintained by the Department except for summary statistical data collected by the Office of Environment, Safety & Health.

QUESTIONS FROM SENATOR JOHNSTON

Question 2(a): Several witnesses also testified that there were no good reasons for withholding of the worker radiation data, particularly any of the data that is already entered into the computer in the "integrated data base files."

Should there be limitations on access to worker radiation data? What would be the reasons to limit access to data?

Answer: The Department's policy on access to these data is being reviewed as a result of recommendations in the Interim Report of the Secretarial Panel for the Evaluation of Epidemiologic Research Activities. It is the current policy, however, that there should be limitations on access to raw data and to intermediate databases, but not to analysis files from published studies. Raw data contain personal identifiers and medical information on individual workers. Therefore, access must be limited to those with clear, specific, scientific purposes and with mechanisms in place to protect the privacy of individuals. Intermediate Data, as described earlier, have undergone various edit and consistency checks and linkage processing. Even at this stage of data preparation, the data are not completely valid and error-free. Also, subsets of this intermediate data often are the subject of a particular study and are considered to be work-in-progress. Therefore, in accordance with scientific tradition, data that are the subject of a specific current investigation are made available at the time of publication of results, not during the data collection or validation phases. Data on cause-of-death cannot be released without approval of the States.

QUESTIONS FROM SENATOR JOHNSTON

Question 2(b): **Are there situations in which it would not be in the public interest to release worker radiation data? Are there any risks to providing open access to worker radiation data?**

Answer: The Department's policy on access to these data is being reviewed as a result of recommendations in the Interim Report of the Secretarial Panel for the Evaluation of Epidemiologic Research Activities. It is the current policy, however, that it would not be in the public interest to release data with personal identifiers or that may contain errors. The risks involved in providing open access are the violation of individual privacy that would occur with the disclosure of sensitive personal information and the potential to mislead the public and regulatory bodies regarding radiation risks if their views are based on erroneous or incomplete data. In addition, open access could adversely affect data acquisition activities that depend on the cooperation of an individual and his belief in the government's ability to maintain confidentiality.

QUESTIONS FROM SENATOR JOHNSTON

Question 2(c):	Could this data be misused by individuals? How do we provide protection against misuse?
Answer:	Data always can be misused by individuals. Some of the best ways to protect against misuse are to require approval of scientific protocols and credentials of individuals seeking access to data, to require agreements to maintain privacy and confidentiality of data, and to require independent peer-review and publication of results from studies using these data.

QUESTIONS FROM SENATOR JOHNSTON

Question 3(a): S. 1802 would allow access to radiation data to qualified independent researchers but would require that researchers' proposals be favorably reviewed prior to release of data. Researchers would also have to agree to protect the confidentiality of personal records and to pay the direct costs of access to the data.

What are the reasons for establishing this threshold for access to radiation data?

Answer: Except for analysis file data, DOE-contractor worker data contain individual identifiers, or may contain enough information on an individual to infer his or her identity. Therefore, protection of individual privacy must be assured. The reason protocols are to be approved by a National Academy of Sciences committee is to ensure that the data are used for appropriate scientific purposes.

QUESTIONS FROM SENATOR JOHNSTON

Question 3(b): If researchers agree to protect confidentiality and to pay for access to the data, why shouldn't it be provided to anyone who requests access?

Answer: Even if researchers agree to protect confidentiality and to pay for access to data, the data should not be provided to everyone who requests access. Until such time as the data have been analyzed thoroughly, experience has shown that they likely may contain errors which must be corrected by review of workers' records. Analyses based on erroneous data could mislead the public, as well as regulatory and radiation standards-setting bodies, regarding the potential magnitude of radiation risks. Since the data are very complex, substantial resources would have to be devoted to assisting users of the data in understanding how the provided information was derived. Currently, the necessary resources are not available if the data were provided to everyone who requests access.

POST-HEARING QUESTIONS AND ANSWERS

GEORGE B. MERRICK
VICE PRESIDENT
ROCKWELL INTERNATIONAL CORPORATION

OCTOBER 31, 1989

QUESTIONS FROM SENATOR JOHNSTON

Question 1: Your testimony mentions three areas of controversy between you and the government over future operations at Rocky Flats.

a. What were the issues in controversy, how did they arise, and how did you propose to deal with them?

b. Is it your position that these issues ought not to be obstacles to continued operation of the plant from a substantive point of view?

c. In each case, what is the risk to workers or to the public of an exemption from the legal requirement that led to the controversy?

d. What alternatives are available to your successor contractor at Rocky Flats with respect to each of the three areas?

Response: a. The three issues that I referred to in my testimony are the three issues we raised in our suit against the Departments of Energy and Justice and the Environmental Protection Agency. The suit alleged that the Justice Department (DOJ) and the Environmental Protection Agency (EPA) are seeking criminal prosecution of Rockwell for actions the Department of Energy (DOE) insists Rockwell continue performing or face civil action for breach of contract. The suit alleged that it is an unconstitutional deprivation of due process of law for one agency of the government to seek to penalize someone for heeding the directions of another agency of government. The suit also alleged that the government's conduct, as a whole, violates the Administrative Procedure Act because it is arbitrary and capricious.

The suit points to three specific areas intrinsic to the operation of the Rocky Flats Plant as to which the government, at the highest levels, is imposing conflicting demands on Rockwell. More particularly, these issues are: (1) the generation and storage of "land disposal restricted" wastes; (2) Plutonium Recovery Operations; and, (3) the re-use of certain treated water at the Plant.

(1) Certain types of waste, generally referred to as the "land disposal restricted" or "LDR" wastes may, under EPA regulations, only be accumulated and stored until a sufficient quantity is available to make final treatment and disposal economically feasible. If no treatment is available, the wastes may not be generated. The Rocky Flats Plant generates LDR wastes for which no final treatment, authorized under applicable laws or regulations, is currently available because the waste is mixed with radioactive waste. Acceptable treatment is available for the radioactive component of these wastes or for the hazardous components, but not for the materials in combination. The DOE for some time has been aware

of this problem, which affects most of the nation's nuclear weapons plants and not only the Rocky Flats Plant. DOE has not authorized or provided an acceptable treatment program for such mixed LDR wastes, yet it insists that Rockwell continue the production operations at the Plant which generate these wastes. The DOJ and EPA now threaten Rockwell with criminal prosecution for continuing to generate and store these wastes, while the DOE threatens Rockwell with legal action for breach of contract if it suspends these operations.

(2) The Rocky Flats Plant includes a plutonium recovery facility which extracts valuable plutonium from various materials for use in the Plant's primary function, the production of components of nuclear weapons. Because plutonium is a scarce and very expensive element, DOE requires that plutonium be recovered from certain materials and that other materials be stored and maintained for plutonium recovery. This material cannot be discarded because of its radioactivity, its significant value and its necessity for national security.

This issue involves a disputed question of statutory construction regarding the EPA's authority to regulate certain processes. Operators of government nuclear facilities generally, including Rockwell, have believed that EPA's jurisdiction only applies to waste, not to material being reclaimed or recycled (American Mining Congress v. E.P.A., 824 F.2d. 1177 D.C. Cir. 1987). Other operators and Rockwell have believed that the EPA's authority did not extend to processes such as the Plutonium Recovery Operation because such processes do not involve material being discarded. The DOE and the DOJ had previously agreed with this analysis.

The DOJ and the EPA now claim that the plutonium residues stored at the Plant, and which continue to accumulate as long as the Plant operates, are hazardous waste and must be stored according to EPA regulations. The materials are safely stored in accordance with DOE regulations governing safe and secure storage of radioactive material. But the Plant does not have the physical facilities which would be required to store this material consistent with EPA regulations, and Rockwell is not permitted to change or add facilities without DOE direction and funding. DOJ threatens to prosecute Rockwell for the generation and storage of these materials while DOE threatens Rockwell with civil breach of contract for suspending operations which continue to generate this material.

(3) Finally, the Plant re-uses virtually pure water that is one of the end products of the treatment of hazardous liquid wastes. That treatment is an evaporation process which creates a salt which is hazardous and handled safely in accordance with all applicable requirements. It also produces virtually pure water which is used in Plant utilities, such as the steam heating system. After use in Plant utilities, this water is treated and disposed of through the Plant's sewage treatment facility. EPA regulations specify that anything

"derived from" a hazardous waste is, by definition, itself a hazardous waste, even if it is totally safe. DOE and Rockwell have always believed that an exception to this rule, which permits re-use of a "derived from" material as a substitute for a commercial product, applied to this evaporator water. Without this re-use, the Plant would have to purchase water for use in its steam plant and other utilities. The re-use of this water is "built-in" to the structure of the Plant. DOJ alleged for the first time in the search warrant affidavit that the ultimate disposal of this evaporator water through the sewage facility without a RCRA permit is a criminal violation. The Colorado Department of Health agrees with Rockwell's position on this issue and has recently reaffirmed this agreement, but, to the best of Rockwell's knowledge, DOJ has not changed its position. Again, DOJ threatens to prosecute Rockwell for actions DOE requires Rockwell to continue.

Rockwell is seeking injunctive and declaratory relief preventing the government from imposing these conflicting demands. Rockwell does _not_ seek any immunity regarding past actions. All that Rockwell seeks is _consistent_ government direction so that it can continue to operate the Plant and discharge its obligations in a responsible fashion without allegations that this on-going conduct violates laws and regulations with criminal penalties.

When our analysis identified these three issues as exposing our people and our company to a threat of potential liability for future actions in continuing to operate the Plant, we advised DOE that we intended to suspend production operations so that we could cease, or minimize as much as possible consistent with maintaining the Plant in a safe condition, these alleged violations. We sought to suspend production operations unless or until all the agencies involved could agree that we would not be subject to the threat of additional liability for future actions. DOE, as you know, directed us to continue production operations in spite of these allegations and in spite of the fact that no such agreement was reached.

b. These issues should not be an obstacle to continued operation of the Plant. As discussed above, the issues are technical or procedural rather than substantive.

c. In all cases, there is no risk to the public or to the workers from continued production operations. The LDR wastes are appropriately and safely stored pending availability of a treatment process. The Plutonium Recovery Operations are the subject of a strictly legal dispute; the operations can and have been conducted safely. The Plant has been safely re-using the evaporator water for years.

d. The options available to Rockwell were either to suspend production operations and risk being held in default of our contract or to continue production operations and rely on the good will of the Justice Department and its vague assurances regarding its exercise of "prosecutorial discretion". We do not know if our successor has developed or discovered any other options.

> Question 2: Assume that title VIII of S.1802 were law at the time you became concerned about your position as principal contractor at Rocky Flats. Specifically, how would you have behaved differently and how would events have unfolded differently in your view with the title VIII process available?

Response: Had title VIII of S.1802 been law, we would have urged the Secretary of Energy to initiate the compliance agreement process pursuant to Section 801 and to include these three items in the inventory of potential violations pursuant to Section 802(a). If the Secretary were unwilling to initiate the process, or to include all three items in the inventory of violations, events would probably have unfolded in a similar fashion. The Committee should consider amending Section 801 to permit the operating contractor, as well as the DOE, to initiate the process and to list potential violations. If the process were initiated, and these issues included, then the protection afforded by Section 805(a) would have made our attempts, including our lawsuit, to obtain consistent government direction unnecessary. The events which gave rise to our decision to withdraw as the operating contractor at Rocky Flats would not have occurred.

Question 3: As I understand it, Rockwell was not included as a party to the compliance agreement at Rocky Flats for a number of reasons, including ambivalence on Rockwell's part and reluctance on DOE's part. It seems to me that many of the problems could have been avoided if Rockwell had been included in the compliance negotiations.

a. Do you agree with that conclusion?

b. With the benefit of hindsight, do you believe that Rockwell should have been included as a party to the compliance agreement? In a similar circumstance, do you believe that Rockwell would ask to be party to the agreement?

Question 4: What are the advantages and disadvantages of requiring a principal contractor to be a party to a compliance agreement under title VIII?

Response: We do not believe it is generally appropriate for the contractor to be party to compliance agreements involving government owned facilities, although we believe contractor participation in negotiations can be useful in certain circumstances. Where a contractor is a party to a compliance agreement, the regulating authority can bring an enforcement action directly against the operating contractor. This is particularly inappropriate at government owned-contractor operated nuclear weapons facilities because the contractor generally does not have the ability to comply without government direction and funding. By law, the government controls the essential raw materials, the government controls access to all essential technical information, the government controls the location, construction and design of all physical facilities, the government controls the manner of production, the government controls the funding and staffing of the operations, and the government is the only customer. If a contractor believes changes in physical facilities or production processes are necessary to comply with environmental laws, it cannot make those changes unless the government approves, and funds, the changes. All a contractor can do is submit the recommendation.

Since a managing contractor does not have control over bringing a government owned facility into compliance with environmental law, it would not be appropriate to make the contractor a party against whom a compliance agreement could be directly enforced.

For these reasons we did not ask, nor in the future would we ask, to be a party to such a compliance agreement. Had we known that DOE would negotiate some degree of protection from liability for itself and its employees while securing no similar protection for its contractor and the contractor's employees, we would with hindsight have asked to participate in the negotiations and the drafting of the agreement between DOE and EPA.

> Question 5: Obviously, Rockwell did not feel that the September 14, 1989 letter from Richard Stewart, Assistant Attorney General for the Land and Natural Resources Division, stating the agency's "general practice" on prosecution provided sufficient assurances to continue as a contractor at Rocky Flats. Have you spoken to any other DOE contractors about their reading of the Justice letter?

Question 6: Secretary Watkins indicated on October 5 that EG&G was familiar with the contents of the Justice letter and was aware of the issues involved at Rocky Flats.

a. Is it your understanding that EG&G is comfortable with the Justice letter and does not feel any further assurances are necessary?

b. Have you heard from any other DOE contractors about their concerns about liability under the current conditions?

Response: A few Rockwell officers have spoken to officers of other DOE contractors regarding Rockwell's experiences at Rocky Flats. These conversations were not extensive or detailed and we did not seek their views on the issues we were facing. These conversations consisted almost exclusively of Rockwell providing purely factual information to other contractors. We do not believe it would be appropriate for us to presume to be a spokesman for any other DOE contractor.

With respect to EG&G, we have no information as to its level of "comfort" or whether it requires further assurances. Our role was and is to provide them with all factual information and other similar assistance that we can in order to assure the smoothest possible transition. We have not discussed with EG&G any of the controversial issues underlying our concerns and believe it has been and continues to be totally inappropriate for us to do so.

QUESTIONS FROM SENATOR McCLURE

> Question 1: What effect do you think your experience at Rocky Flats will have on the willingness of other contractors to serve at DOE facilities?

Response: As we stated in response to Senator Johnston's fifth and sixth questions, we do not believe it would be appropriate for us to speak for other DOE contractors. Speaking only for ourselves, our experience led us to conclude that it was in the best interests of Rockwell, and our employees at Rocky Flats, for us to withdraw as the managing contractor at Rocky Flats.

> Question 2: How would your experience at Rocky Flats have been different if S.1802 was in effect?

Response: This question is similar to Senator Johnston's second question, and we offer the same response.

> Question 3: You sued the government because you say you were being ordered by DOE to do things at the Rocky Flats Plant that DOJ says are illegal. Can you explain why you felt you had to take that step?

Response: We filed our lawsuit because the DOJ, DOE and EPA were unwilling to act in a coordinated and constructive way to address substantively and unequivocally the situation facing all of us at Rocky Flats. Each agency remained focused on its own agenda. In spite of DOE's recent statements that compliance with environmental laws is now its first priority, the DOE directed us to continue production. And it did so in spite of DOJ's allegations that production operations violate environmental laws. DOJ and the EPA, rather than dealing with the three specific issues we raised, maintained their options to take action against us no matter what we did. Since the government agencies were unwilling to speak with one voice, the only recourse we saw was to seek relief from the courts.

> Question 4: What kind of effect has the search warrant, the criminal investigation and the publicity had on Rockwell and its employees at Rocky Flats?

Response: The effect of the government's sensational allegations and tactics on our employees has been very traumatic. The government's failure to deal responsibly with the consequences of its actions has been equally troubling.

We question the government's motives in using a search warrant, a very dramatic event, to begin its investigation. We also question the government's motives in publicizing the search warrant affidavit with its sensational allegations and sly innuendos. These theatrical means were unnecessary. Rocky Flats is a government owned facility. Almost without exception, all documents at the facility are government property. The Justice Department had the written consent of the Secretary of Energy to search the Plant. Clearly the Justice Department did not need a warrant if all it wanted to do was search the Plant and seize documents and other government property, such as water and soil samples.

The effect on the public, and the effect on our employees, is just what one could have predicted. The search and the publication of the affidavit generated an atmosphere of fear and hysteria, particularly in the communities around the Plant, where most of our employees live. Our employees find themselves subject to suspicion and distrust by their friends and neighbors.

What everyone forgets is that our 5,400 employees at Rocky Flats also live near Rocky Flats. They, and their families, breathe the same air and drink the same water as everyone else who lives near the Plant. They deeply resent the allegations that they would ever deliberately do anything to endanger their families and their neighbors. They deeply resent the treatment they have received from the government.

The search has also made rational discussion of the environmental issues at the Plant very difficult. It has polarized opinions and has closed many minds to the facts.

To make a bad situation worse, the government has refused to acknowledge that the sensational allegations in the search warrant affidavit are flatly wrong. For example, the most sensational allegation, the one that made the most headlines, was that an incinerator was secretly run and that the FBI had infra-red photographs of a smokestack that showed it was secretly run. The facts are these: The incinerator was shut down when we said it was shut down and we believe the FBI misinterpreted its photographs. Despite our repeated requests, the government has not allowed us access to these photos. The smokestack in question is used primarily as an exhaust to keep the plutonium operations building under "negative" pressure. This is a safety feature which causes any air leaks to be inward, not outward. Before the air can get out the stack, it has to go through many very effective filters. The normal flow up that stack is 200,000 to 220,000 cubic feet per minute of room temperature air, twenty-four hours a day, seven days a week. When the incinerator runs, it adds a mere 850 cubic feet per minute of air, cooled to approximately 99 degrees Fahrenheit. We believe this would increase the temperature of the airflow no more than 2.7 degrees Fahrenheit, and increase the temperature of the chimney structure even less. To determine that low a difference in the air flow by examining infra-red photos of the smokestack, under different weather conditions, is a very difficult matter. We do not believe the relatively simple infra-red analysis described in the search warrant affidavit could support the conclusion drawn by the government. In addition, all the records and other evidence, which the government has, prove this allegation is false.

We think the government was wrong in other areas as well. We gave the Justice Department the results of our investigation and asked them to make their evidence public so that together we could calm public fears and put these allegations to rest. They have refused to do so. Our employees also know these allegations are false, and they have repeatedly informed the government's investigators that these allegations are false. They, and we, deeply resent the government's refusal to acknowledge the inaccuracies in the search warrant affidavit.

Finally, we and our employees are now concerned that the government, by choosing to begin this investigation in such a dramatic and public fashion, has painted itself into a corner. By needlessly generating public fear and hysteria, the government may have created an atmosphere that would make a decision not to bring criminal charges politically embarrassing. One of the major justifications for maintaining the strict secrecy of grand jury investigations is to . . . "assure that persons who are accused but exonerated by the grand jury would not be held up to public ridicule." Douglas Oil v. Petrol Stops Northwest 441 U.S. 221, 219 (1979). The government may now believe that it would be held up to public ridicule if it decided not to bring charges and that it might therefore bring charges it would otherwise decline to pursue.

> Question 5: There have been numerous allegations that the DOE contractors want total immunity for misconduct at the facilities. That is not what is given in S.1802. Is that what Rockwell was looking for?

Response: No. Rockwell has never sought immunity for any past actions. What we have sought is an assurance that future actions, as required by our contract with DOE, would not expose our people and our Company to any additional risk. We never sought immunity for past actions. We don't think we need it. We only sought assurances regarding the future. S.1802 would have provided the type of assurance regarding future conduct that we sought and which we believe is appropriate.

> Question 6: Why was the DOJ letter by Mr. Stewart unsatisfactory to Rockwell?

Response: Assistant Attorney General Stewart's letter to Admiral Watkins and Administrator Reilly of September 14, 1989, was unsatisfactory for three reasons. First, it was a general statement of policy whereas we had been seeking a resolution of three specific issues. Second, the general policy statement clearly reserved the Justice Department's right to prosecute contractors and their employees for following directions, in good faith, from the government pursuant to a government contract. And, third, the limited "relief" offered is based on the existence of a compliance agreement which is beyond the ability of a contractor either to bring about or, if brought about, to implement on its own.

POST-HEARING QUESTIONS AND ANSWERS

GERALD F. SCANNELL
ASSISTANT SECRETARY OF LABOR
OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

NOVEMBER 13, 1989

Responses to Followup Questions from Senator Bennett Johnston:

Question:

1. If legislation was enacted to phase-in compliance with OSHA at Department of Energy facilities over a 3 or 5 year period, how would worker health and safety be regulated in the interim period?

a. What regulations would apply?
b. Would OSHA conduct inspections at these facilities?
c. How would the regulations be enforced?"

Response:

1. If legislation were enacted to require compliance with the Occupational Safety and Health Act (OSH Act) at DOE nuclear facilities over a 3 or 5 year phase-in period, OSHA would assume regulatory authority on the date on which the legislation made that new authority effective (in S. 1802, five years after enactment). Until then, while DOE would continue to exercise sole regulatory authority, the two agencies would work together to effect a smooth transition to the state of dual authority that the legislation envisions. (All the bills that have been introduced for this purpose propose to amend section 4(b)(1) of the OSH Act and leave intact section 161(i)(3) of the Atomic Energy Act of 1954, thereby authorizing both DOE and OSHA to oversee the safety and health of workers at these facilities.)

a. DOE regulations would apply during the phase-in period. (DOE has adopted OSHA's safety and health standards as DOE standards.) At the end of the phase-in period, any differences in applicable regulations would be minimal since DOE would still have the authority to enforce any safety and health regulations it may have issued beyond those of OSHA. Further, during the phase-in period, OSHA would have the opportunity to determine whether any additional regulations were needed to ensure a safe and healthful place of employment for workers at DOE nuclear facilities.

b. OSHA would not conduct "inspections" at the DOE facilities until the authority to do so had been conferred (in S. 1802, five years after enactment).

c. During the phase-in period, DOE would be responsible for enforcing its regulations through the contract process. (Provisions in the contracts between DOE and the plant operators would require compliance with DOE regulations for worker safety and health.)

Question:

2. The Glenn bill would also require annual inspections at all DOE facilities. You state in your testimony both that OSHA does not have the resources for annual inspections and that the OSHA Act did not envision annual inspections.

a. In general, how often does OSHA conduct onsite inspections?
b. How is this policy determined?
c. Would you describe the type of facility that OSHA considers a "high hazard" facility and how often such a facility would be inspected?
d. Would DOE facilities be considered "high hazard" facilities? If not, how do they differ from "high hazard" facilities?

Response:

2. a. In fiscal year 1989, OSHA conducted inspections in approximately 54,600 of the nearly 4 million establishments covered by Federal OSHA. That means that last year Federal OSHA inspected, on the average, about 1.4 percent of the establishments it covers. Since OSHA concentrates its discretionary, or "programmed" inspection activity on establishments in "high-hazard" industries, those establishments may expect a visit more frequently than establishments in low-hazard industries, most of which may never receive an OSHA inspection. The frequency of OSHA's programmed inspections depends upon the inspection resources available after non-discretionary or "unprogrammed" inspection requirements (as described below) have been met.

b. Some inspection priorities are determined by statute, others by regulation; and the remainder by a targeting system devised to direct the agency's discretionary resources to the most hazardous workplaces while assuring that no employer is exempt from an inspection. The OSH Act and regulations issued under that Act require OSHA to respond with an inspection to certain situations in the following order of priority: (1) reports of imminent danger; (2) accidents involving a fatality or the hospitalization of five or more persons; (3) formal (i.e., written, signed) complaints from employees; and (4) referrals from other agencies or officials, including OSHA's own compliance officers. Beyond these, OSHA initiates, or "programs," inspections in: (a) high-hazard industries such as construction, certain manufacturing industries, logging, maritime, and oil and gas; (b) industries with a history of serious violations of OSHA's health standards; and (c) operations on which the agency has placed "special emphasis," such as the chemical manufacturing industry in 1986. So that every employer is subject to the possibility of an OSHA inspection, the agency conducts five percent of its programmed inspections in low-hazard manufacturing industries, and another five percent in non-manufacturing industries otherwise not targeted.

c. For programmed **safety** inspections, OSHA considers as high-hazard all industries with lost workday injury rates (LWDI) higher than the national average. This group includes construction, logging, oil and gas, maritime, and certain manufacturing industries. In FY 1989, Federal OSHA conducted about 6,500 programmed safety inspections of establishments in high-hazard manufacturing industries from a universe of almost 85,000; and about 25,000 programmed safety inspections at construction worksites from a universe of some 270,000.

For programmed **health** inspections, OSHA considers as high-hazard the industry segments that have a history of serious violations of OSHA's health standards on past OSHA inspections. In FY 1989, OSHA conducted 2,840 programmed health inspections of establishments in high-hazard industry segments from a universe of approximately 78,000 such establishments.

d. Some activities at DOE facilities, such as construction, would clearly fall into OSHA's present high-hazard categories. The DOE manufacturing plants would most probably be included in the high-hazard grouping. Each manufacturing facility would have to be examined separately, however, to determine its Standard Industrial Classification (SIC); whether it would be included in OSHA's current targeting system for programmed safety inspections in the manufacturing sector would depend on the LWDI for that SIC.

Question:

3. Both the Glenn bill and S. 1802 would require the Secretary of Labor to promulgate new regulations to govern the application of OSHA to DOE facilities. You state in your testimony that OSHA does not believe new regulations would be necessary. Your testimony states that if there are special needs for the DOE workplace they could be addressed in "a more expeditious fashion than simply starting from scratch."

a. What sort of special needs might arise?
b. Would new regulations or procedures be necessary to allow for unannounced inspections?
c. Would new regulations be necessary to ensure the safeguarding of national security information?

Response:

3. a. In the three Tiger Team visits in which OSHA participated, there were a number of instances where serious hazards were noted for which OSHA had no standard. The OSH Act makes provision for such situations in its "general duty clause," which requires employers to abate recognized hazards. Further, many of the hazards for which OSHA had no standard will be addressed by agency rulemakings now nearing completion or by standards proposals under development. Nonetheless, we would need to examine some of the remaining hazards which we found and for which OSHA has no standard, particularly those relating to explosives, to determine whether further regulation is needed.

b. c. OSHA has issued a regulation providing for unannounced inspections (29 CFR 1910.3). The same regulation requires that inspectors with access to information classified in the interest of national security obtain appropriate security clearances. OSHA currently has experience in inspecting a number of other classified operations such as Department of Defense (DOD) contractors and DOD military establishments and thus has procedures in place for safeguarding national security information.

Question:

4. You state in your testimony that OSHA's resources are extremely limited and that additional resources would be required if OSHA were given the responsibility for worker health and safety at DOE facilities.

a. Can you give the Committee an estimate of what additional resources would be required?

Response:

4. a. If OSHA were given the responsibility for worker health and safety at DOE facilities, the additional resources required to exercise that responsibility would depend largely on two factors: (1) the level of inspection activity required by the authorizing legislation and (2) the number of accidents that might occur and employee complaints that might be received following the acquisition of authority.

It is difficult for OSHA to provide accurate estimates of the additional resources needed to fulfill the new responsibilities the agency would have under the proposed legislation. DOE has told us that there are 102 facilities that would be subject to the legislation pending before the Committee. There is tremendous diversity and variation in size among these facilities, one of which spreads over a geographic area the size of the State of Rhode Island and contains literally hundreds of buildings. OSHA has little firsthand knowledge of these plants. Our participation on DOE Tiger Teams has allowed us to visit only selected units at a few facilities. We have begun the onsite phase of our evaluation of DOE's overall safety and health program. That evaluation, which will be completed in October 1990, should provide the basis for realistic estimates of the additional resources needed by the agency to meet the requirements of the bills before the Committee.

With those caveats in mind, we are supplying the Committee with some very rough estimates of the additional resources required by OSHA under S. 1304 and S. 1958. These estimates assume there is no change in either bill and that OSHA does not alter its priorities in how it assigns staff.

S. 1304 would require annual comprehensive inspections of 102 DOE nuclear facilities. OSHA estimates that to conduct 102 comprehensive inspections and another 275 complaint and accident investigations annually at these facilities would require an additional 175 employees and $10.8 million in funds if no other changes to the agency's priorities and staff allocations were made. Most of these resources would be devoted to the annual programmed comprehensive inspections required under the bill, with a smaller amount of resources allocated to the 275 complaint and accident investigations which we have postulated would occur. (There is continual construction activity at these facilities and OSHA expects that the number of complaints from the construction trades and the number of accidents at those construction sites would be significant.) These estimates include compliance, training, administrative, and support personnel and costs for the enforcement effort required under the bill. They do not include estimates of the costs of any additional standards development that might be needed or of the additional legal work required of the Solicitor of the Department of Labor, nor do they allow for any special needs for equipment or organizational changes within OSHA or special contractual expertise required by the nature of the DOE facilities.

S. 1958 not only would require annual comprehensive inspections of DOE nuclear facilities, but would also require resident OSHA inspectors at each of these facilities. OSHA estimates that to fulfill the resident inspector requirement and the requirement for traditional enforcement inspections, including annual inspections of each of the 102 DOE nuclear facilities, would require from $20.1 to $29.6 million in additional funds and from 325 to 474 additional employees, depending on the number of compliance safety and health officers (CSHOs) assigned as residents to each of the 102 Government-owned, contractor-operated facilities maintained by DOE.

The lower of these estimates assumes that one CSHO would be assigned to each facility; the higher figure assumes that there would be two CSHOs at each site--one safety and one health compliance officer. Resident inspectors would be on site to advise and consult, in addition to assuring compliance generally with OSHA standards and specifically in response to worker complaints. They could not be expected to conduct enforcement inspections, which traditionally are unannounced. (For a large facility like a DOE nuclear production plant, the required comprehensive annual inspection would normally require a team of compliance officers.) It is likely that many complaints at the nuclear facilities would be handled by the resident inspectors without an unannounced inspection. It is less likely that the complaints from construction workers could be handled successfully in the same manner. Consequently, OSHA has assumed that the investigations of complaints, fatalities/catastrophes, and referrals would continue (though at a somewhat reduced frequency) even if there were resident inspectors at these facilities. Possibly only 200 complaint and accident investigations would be required each year, making only a minimal difference in the estimates for traditional enforcement inspections (as distinct from the activities of the resident inspectors).

These rough estimates, as noted above, do not include staff for any standards development that might be needed or for legal work; nor do they allow for any special needs for equipment or organizational changes within OSHA or special contractual expertise required by the nature of the DOE facilities.

A further breakdown of these rough estimates is provided in the following table:

	Total FTE	CSHO FTE	Total $
Traditional Inspections:	175	132	$10.8 million
Resident Inspectors:			
1 per site	150	102	$ 9.3 million
1.5 per site	223	153	$13.9 million
2 per site	299	204	$18.8 million
Traditional Inspections and Resident Inspectors:			
1 per site	325	234	$20.1 million
1.5 per site	398	285	$24.7 million
2 per site	474	336	$29.6 million

S. 1802 is silent on a required level of OSHA inspection activity and would allow the Secretary of Energy and the Assistant Secretary of Labor for Occupational Safety and Health to determine, with appropriate public input, the "manner and process of enforcement" of safety and health standards at DOE nuclear facilities. If this were interpreted to mean that OSHA would apply its present system of enforcing the OSH Act to DOE nuclear facilities, OSHA would presumably conduct an undetermined number of comprehensive programmed inspections in these facilities each year, but much fewer than the 100 annual inspections required under the other two bills, and at the same time would presumably have to respond to a higher number of worker complaints than estimated above, at least in the years immediately following assumption of this new authority. OSHA would also respond to any accidents, the occurrence of which, as noted, is difficult to predict. Additional resources would certainly be required by OSHA to implement S. 1802, but the extent of the agency's new responsibility would be determined through the planning process established in the bill. At this juncture, the variables are too many to permit us to give you any dollar estimates.

Question:

5. In June, when Secretary Watkins announced his 10-point initiative, he stated that the Department would develop a 5-year plan for phase-in of full compliance with OSHA standards at DOE facilities.

a. In your opinion, what does that mean? Has OSHA been in touch with the Department about how this plan would be developed?
b. Do you have an opinion on how such a plan should be developed?
c. Does S. 1802 establish adequate procedures for developing such a plan? If not, how should S. 1802 be amended to address this?

Response:

5. a. and b. Secretary Watkins announced in June that DOE was preparing a five-year defense facilities modernization plan in which full compliance with OSHA standards would be a central element. Secretary Dole and Secretary Watkins have worked closely on this project, as have OSHA and DOE's Office of Environment, Safety and Health.

We believe that the most effective way to develop a long-range plan for full compliance with OSHA standards at DOE nuclear facilities would be to have OSHA conduct a comprehensive evaluation of DOE's management of employee safety and health at those facilities. Such an evaluation would be consistent with OSHA's present practice of evaluating other Federal agencies' overall safety and health programs and would allow DOE to institutionalize through departmental regulations any recommended improvements in its program so that there would be a lasting impact on the DOE program. We are proposing to conduct such an evaluation in the comi~~ng months.~~ OSHA will provide any training needed for DOE personnel to correct deficiencies identified during the evaluation and to assist them in setting up incentive programs to enhance contractor performance in providing safe and healthful employment.

c. As we understand the purpose of the plan, it appears that the procedures of S. 1802 are flexible enough to allow for its development.

Questions:

6. As a matter of public policy, do you think it is appropriate for OSHA to take over the responsibility for worker health and safety at DOE facilities?

7. You stated at the hearing that there was no reason that DOE was not capable of regulating itself. But, is it more appropriate for OSHA to regulate compliance with its standards at DOE facilities than for DOE to regulate itself according to equivalent standards?

Response:

6. and 7. I believe the Department of Energy is capable of developing, implementing and maintaining a good program for assuring the safety and health of workers at DOE's GOCOs. The three basic elements of any good safety and health program are: (1) an effective organization and structure which includes such elements as adequate staffing, resources, and procedures to assure safety and health; (2) the commitment and involvement of top management with the authority to implement the safety and health program; and (3) communication of that commitment to the staff. The Department of Labor has proposed conducting a thorough and comprehensive review of DOE's program to ensure safety and health at DOE's GOCOs and to make recommendations to DOE for improvements in the program. DOE supports this program review and intends to implement those recommendations which will enhance the program. OSHA believes this will assure a good safety and health program structure.

With regard to the first point, OSHA is conducting a thorough and comprehensive review of DOE's GOCOs and will make recommendations to DOE for improvements in its safety and health program at GOCOs. DOE supports this program review and intends to implement those recommendations which will enhance the program. OSHA believes this will assure a good safety and health program at DOE. With regard to the second point, I believe that Secretary Watkins has the will and commitment necessary to implement and manage a good worker safety and health program for DOE workers as well as GOCO employees. And, finally, he has demonstrated that commitment down the line.

S.1802 proposes authorizing OSHA to regulate and enforce worker safety and health at DOE GOCOs (while leaving intact DOE's similar authority under the Atomic Energy Act). OSHA could, in theory, assume responsibility for regulating and enforcing the safety and health of workers at GOCOs. In reality, the following is true:

(1) Under the OSH Act, DOE, as an owner and the employer of many employees at GOCOs, would still have the basic responsibility for worker safety and health at GOCOs that any employer is charged with by the OSH Act. Under S.1802, DOE would therefore continue to need a good worker safety and health program including adequate staffing.

(2) In the five-year interim, as we have noted in answers elsewhere, there would be a limited role for OSHA during a phase-in period, and additional resource needs would be small, if any.

(3) After five years, S.1802, as currently structured (with no transition for hiring and training inspectors), would transfer additional staffing and resources to OSHA as well as responsibility for enforcing OSHA's regulations at GOCOs. The reality is: at that time (1996), we would probably begin to hire several hundred compliance officers. This would take several years. Upon hiring, OSHA would train the new inspectors. (It generally takes three years before a new compliance officer is ready to assume full responsibilities for a complex inspection.) This process would mean that OSHA would not be able to adequately carry out its new responsibilities at GOCOs until the late 1990s (five years plus three years). Alternatively (under S.1802), OSHA could transfer its compliance officers from current inspection activities to inspection of GOCOs. This alternative would weaken OSHA's current program and reduce OSHA's efforts to protect the 88 million workers presently covered by the Act.

For the above reasons, DOL/OSHA believe it is better public policy for Congress to (1) await OSHA's report and recommendations to DOE for GOCO safety, (2) assure implementation of the report recommendations, and (3) aggressively use Congressional oversight authorities to assure that, whoever is at the helm of the Department of Energy, the appropriate emphasis remains on safety and health. DOL/OSHA wholeheartedly support this approach and would work with Congress to assure that DOE has a long-term program in place that will enhance safety and health for workers.

POST-HEARING QUESTIONS AND ANSWERS

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NOVEMBER 13, 1989

Responses for the Record by
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To Questions from Senator Bennett Johnson
Subsequent to the Hearing Before the
Senate Committee on Energy and Natural Resources
November 13, 1989

QUESTION 1

I BELIEVE THE GOAL OF BOTH THE WIRTH BILL AND THE GLENN BILL IS TO OBTAIN THE BEST POSSIBLE SCIENTIFIC JUDGMENT ON THE HEALTH EFFECTS OF RADIATION AND TO PROVIDE GREATER ACCESS TO THE EPIDEMIOLOGIC DATA COLLECTED BY THE DEPARTMENT OF ENERGY.

A. DO YOU BELIEVE THERE ARE OTHER WAYS TO ACCOMPLISH THIS GOAL SHORT OF TRANSFERRING ALL RADIATION RESEARCH FUNCTIONS TO HHS?

RESPONSE

Yes, the most obvious response to this question is to leave the Epidemiology Program in place at the Department of Energy and attempt to correct and strengthen the shortcomings and weaknesses in the current program. This process has been initiated by Secretary Watkins through his "ten-point plan" (which I will discuss later), and through the appointment of an independent panel (the Secretarial Panel for the Evaluation of Epidemiologic Research Activities [SPEERA]). This panel is charged with the task of providing the Secretary of Energy an independent evaluation of the Department's epidemiology program and the appropriateness, effectiveness, and overall quality of DOE's epidemiologic research activities.

SPEERA will ultimately recommend measures to Secretary Watkins that will ensure that the activities conducted by the DOE Epidemiology Program are appropriate, effective, and represent excellence. One of the options that SPEERA will evaluate is the utility and feasibility of transferring the epidemiologic research function to another entity.

Regardless of whether the program is retained in DOE or placed elsewhere, my person opinion is that in order for it to be successful it will need to have:

1) adequate resources, both money and trained personnel in a variety of disciplines, to effectively continue ongoing programs and initiate new ones. Continuity of these resources should be assured throughout the life of the program; and

2) credibility, through the use of independent oversight committees and a written policy of access to study data by qualified researchers as long as data confidentiality is assured and a peer review procedure is established for all applications for access to these data.

B. WHAT IS YOUR OPINION OF THE INITIATIVES TAKEN BY SECRETARY WATKINS TO ADDRESS THIS?

RESPONSE

Secretary Watkins announced a series of ten initiatives (the "10-point plan") in June 1989. These initiatives were designed to assure full accountability in the areas of environment, safety, and health through changes in departmental organization, management, and contractual procedures. Secretary Watkins is to be commended for his efforts in attempting to correct some of the past shortcomings in the way that DOE has operated their epidemiology program. Two of these initiatives deal directly with that program. The first is to restore the credibility to the program by the appointment of the SPEERA to make recommendations to the Secretary on various aspects of the program (as discussed in detail in the response to Question 1.a) and to appoint a standing oversight committee to be administered through the National Academy of Sciences. The second of these initiatives deals with the issue of access to data through the establishment of a comprehensive data repository which would be accessible by all qualified researchers. It is important that the Secretary be allowed the time and opportunity to implement these initiatives in order to determine if they are effective in addressing the criticisms of the DOE epidemiology program.

QUESTION 2

IN 1984, AN INTERAGENCY ORGANIZATION WAS ESTABLISHED CALLED THE COMMITTEE ON INTERAGENCY RADIATION RESEARCH AND POLICY COORDINATION FOR THE PURPOSE OF COORDINATING FEDERAL RADIATION RESEARCH PROJECTS. AS I UNDERSTAND IT, THIS COMMITTEE INCLUDED REPRESENTATIVES OF DOE, NRC, EPA, HHS, AND PERHAPS OTHERS. THE COMMITTEE IS OPERATED UNDER THE AEGIS OF THE OFFICE OF SCIENCE AND TECHNOLOGY POLICY.

A. DO YOU KNOW ANYTHING ABOUT THE ACTIVITIES OF THIS INTERAGENCY ORGANIZATION?

RESPONSE

The Committee on Interagency Radiation Research and Policy Coordination (CIRRPC) was chartered April 9, 1984 under the Federal Coordinating Council for Science, Engineering and Technology and reports to the Office of Science and Technology Policy, Executive Office of the President. The overall charge of CIRRPC is to coordinate radiation matters between agencies, evaluate radiation research, and provide advice on the formulation of radiation policy. There are eighteen CIRRPC member agencies at this time including representatives from the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Housing and Urban Development, Interior, Justice, Labor, State, Transportation, and Veterans Affairs. Members also represent the Environmental Protection Agency, the Federal Emergency Management Agency, the National Aeronautics and Space Administration, the Nuclear Regulatory Commission, the Office of Management and Budget, and the Office of

Science and Technology Policy. The Science Panel is currently composed of members from fourteen agencies. I am currently a member of a Science subpanel that is developing recommendations on how to use the data from the 1988 United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) Report and the 1989 Report from the National Academy of Sciences' Committee on the Biological Effects of Ionizing Radiation (BEIR V) for developing radiation risk assessment policies for federal agencies.

B. HAS THIS COMMITTEE LOOKED AT THE QUESTION OF WHETHER DOE'S RADIATION RESEARCH STUDIES WOULD BE MORE APPROPRIATELY CARRIED OUT BY HHS?

RESPONSE

The CIRRPC has not, to my knowledge, assessed the need or feasibility of transferring the radiation epidemiology program from the Department of Energy to the Department of Health and Human Services. The issues that the CIRRPC is currently addressing include indoor radon, compensation for victims of radiation exposures, radioactive wastes, and naturally occurring and accelerator-produced radioactive materials.

C. WOULDN'T THIS BE AN APPROPRIATE FORUM TO EXAMINE THAT QUESTION?

RESPONSE

I see no reason why the CIRRPC could not convene an ad hoc committee operating under the auspices of the CIRRPC to deliberate this issue. However, this committee would likely duplicate the current efforts of the SPEERA, appointed by Secretary Watkins, although the composition and perspective of any committee established by the CIRRPC would probably be different than that of the SPEERA.

QUESTION 3

THE DEPARTMENT OF ENERGY'S EPIDEMIOLOGIC STUDIES ARE DONE UNDER CONTRACT.

A. WOULD THIS BE DIFFERENT IN THE DEPARTMENT OF HEALTH AND HUMAN SERVICES HAD THE RESPONSIBILITY FOR THIS WORK?

RESPONSE

The Department of Health and Human Services would likely contract out most of the data collection aspects of these studies. For example, in 1988, Congress charged the Centers for Disease Control (CDC) with conducting a study of residents in communities adjacent to the Hanford Works in Washington State to determine if they are at an increased risk for thyroid diseases as of consequence of radioactive releases from Hanford between 1944 through 1957. The CDC has recently awarded a contract to scientists at the Fred Hutchison Cancer Research Center in Seattle, Washington, to conduct this study. Scientists at CDC will collaborate closely in the conduct and analysis of data from this study.

B. DOES HHS HAVE SUFFICIENT EXPERTISE IN-HOUSE TO ELIMINATE THE NEED FOR PRIVATE CONTRACTORS?

RESPONSE

Although it is likely that DHHS has the largest number of radiation epidemiologists in the world in one organization (CDC, NIH, and FDA) it is still a small number and certainly not adequate to conduct a program of this magnitude and continue current essential activities. We do not have large enough support staffs to initiate and conduct these studies in-house. In addition to increasing epidemiological expertise, we would need personnel with experience in health physics and dosimetry, medical records abstracting, industrial hygiene, tracing and follow-up, data processing, clinical examination, statistics, and survey research. Some of this is available. We have found that it is more cost-effective to contract out various components of epidemiologic research while providing the in-house expertise in epidemiology and statistics.

C. WOULD SOME OF THE SAME CONTRACTORS BE DOING THE WORK FOR HHS AS THOSE WHO ARE NOW DOING THE WORK FOR DOE?

RESPONSE

Because the contracting process at DHHS is both open and competitive, it is likely that current DOE contractors would be qualified to bid and be awarded contracts under any DHHS radiation epidemiology program. The oversight and monitoring of these contracts in DHHS, however, would involve different personnel during the competitive award evaluation phase and after they are awarded. Regardless of where the research is conducted, extramural contractor-conducted epidemiologic research can be of high quality if appropriate in-house expertise is available to carefully monitor these contracts and independent and expert oversight is provided throughout the life of these contracts.

QUESTION 4

AT THE HEARING, YOU STATED THAT HHS WOULD REQUIRE SIGNIFICANT ADDITIONAL RESOURCES IF LEGISLATION WERE ENACTED TO TRANSFER EPIDEMIOLOGIC STUDIES TO HHS.

A. WHAT ADDITIONAL RESOURCES WOULD BE REQUIRED, BOTH IN TERMS OF LEVELS OF FUNDING AND NUMBER OF DEDICATED PERSONNEL?

RESPONSE

My Point at the hearing was that it would be a mistake to assume that HHS could improve the programs with a mere transfer of the current level of resources from DOE. The current annual resources for the DOE epidemiology program are approximately $30,000,000, of which $17,500,000 are committed to the joint American-Japanese Radiation Effects Research Foundation (RERF). While funding for RERF has increased almost [illegible] 000,000 within the last five years, funding for other DOE epidemiology projects has either stayed level or decreased. Just to restore the funding for these essential epidemiology projects (such as the DOE workers' follow-up and surveillance studies) to their 1984 levels would require an additional $4-5 million. In summary, the following additional resources (over the current DOE levels) would be necessary minimums for DHHS to establish and maintain a quality radiation epidemiology program. These figures are my own ballpark estimates and have not been formally reviewed by the Administration; therefore, they do not represent an HHS position.

1) $10,000,000 to restore the viability of current epidemiology programs (in addition to the RERF);

2) a minimum of $15-20,000,000 for new studies to consider issues such as exposures to communities surrounding DOE facilities to both radiation and chemicals. As a way of example, the Hanford Study currently being conducted by the CDC is estimated to cost $6,000,000, and that is for just one DOE facility;

3) $5,000,000 to conduct health hazard evaluations and industrywide studies at DOE facilities. This reflects the role of NIOSH under proposed legislation.

4) a minimum of 30-35 additional full-time personnel with expertise in scientific management, epidemiology, industrial hygiene, occupational health, health physics, biostatistics, data processing, and risk communication. The current DOE radiation epidemiology program has only one epidemiologist to monitor all of the contract research conducted by the program.

QUESTION 5

SENATOR GLENN'S BILL CONTAINS A PROVISION WHICH STATES THAT THE NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH WILL PERFORM FUNCTIONS AUTHORIZED BY THE OSHA ACT AT DOE NUCLEAR FACILITIES.

A. UNDER THIS PROVISION OF THE GLENN BILL, WHAT ACTIVITIES WOULD NIOSH CARRY OUT?

RESPONSE

If S.1302 were amended to include an adequate authorization of resources and those resources were appropriated, NIOSH would conduct health hazard evaluations and industrywide studies at the DOE facilities covered under the legislation. The comprehensive research program would evaluate all chemical, physical, and radiation hazards to which employees at the DOE facilities may be or have been exposed, the health effects of any such exposures, and methods for preventing these exposures. In conjunction with the research program, NIOSH would; (1) disseminate the results of research to DOE, the Department of Labor (DOL), management and labor representatives, subject to the strictures of confidentiality and national security; (2) develop training for occupational safety and health professionals involved with this industry; and (3) recommend standards to DOL and provide scientific support for their regulatory and compliance activities. Finally, as specified by the legislation, the Director of NIOSH would provide consultation to the Secretary of HHS in establishing the "Radiation Research Board" (Title IV, Section 403).

B. IN GENERAL, WHAT IS THE FUNCTION OF NIOSH?

RESPONSE

Established by the Occupational Safety and Health Act of 1970, NIOSH is the Federal agency charged with conducting a national program of occupational safety and health research and information dissemination. The purpose of this program is to establish and disseminate scientific and public health information necessary to ensure safe and healthful working conditions for all American working men and women. To carry out this program, NIOSH conducts multidisciplinary research (e.g., epidemiology, medicine, toxicology, engineering, industrial hygiene, psychology, and other disciplines) to: (1) identify and evaluate occupational safety and health problems; (2) develop "control technology" and work practices to prevent work-related injury and illness; (3) disseminate scientific findings and public health recommendations to government, industry, and academia; and (4) recommend standards and provide scientific findings and public health recommendations to support DOL in its regulatory activities.

QUESTION 6

THE GLENN BILL ALSO STATES THAT NIOSH "SHALL CONDUCT HAZARD EVALUATIONS AT SUCH FACILITIES, INCLUDING IONIZING RADIATION EVALUATIONS."

A. WHAT DOES THIS MEAN?

RESPONSE

Under authority of the Occupational Safety and Health Act of 1970 and the Federal Mine Safety and Health Act, NIOSH conducts a program of approximately 400 "health hazard evaluations "(HHE's) annually. An HHE is an investigation of working conditions at a worksite in response to a request from a representative of the management or employees. A multidisciplinary team (that may be composed of epidemiologists, engineers, industrial hygienists, physicians, toxicologists, psychologists, and other specialists) visit the worksite to evaluate working conditions, the health of employees, and company and employee records to: (1) identify any hazardous working conditions that may exist or have existed at the site: (2) evaluate the extent and severity of any such conditions; (3) evaluate the employees and employee records for health effects that may be or have been caused by conditions at the worksite; and (4) recommend improvements to ameliorate any hazardous working conditions identified.

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